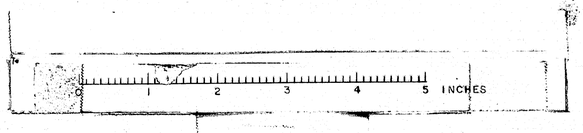
SH 21C OF 44

FINAL SURVEY		BY	DATE
NOTE BOOK NO.	SURVEYED		
	PLOTTED		
	TRACED		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK NO.	SURVEYED	WLC	8-22-75
	PLOTTED	CWL	10-16-75
	TRACED		
	AREAS		
	AREAS CHECKED		

STA. 1000+00 LENGTH OF WORK

75-153



SH 21D OF ##

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
NOTE BOOK		
NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
NOTE BOOK		
NO.	AREAS CHECKED	

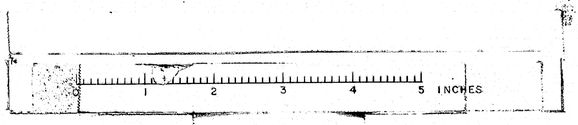


PLATE 3—CROSS SECTION O. P. R. & R. E.

MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY, INC.
BRUNING NO. 805 23031

75-154

SH. 23A OF 44

FINAL SURVEY	BY	DATE
SURVEYED	VSC	1-23-80
PLOTTED	VSC	2-11-80
NOTE BOOK		
TEMPLATE	DDB	2-11-80
AREAS	F.T.M.	2-11-80
NO. 24-1	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED	V.S.C.	10-23-56
PLOTTED	V.S.C.	11-16-56
TEMPLATE		
NOTE BOOK		
NO. 24	AREAS CHECKED	

STA 82+00 LIMIT OF WORK

STA 82+00 LIMIT OF WORK

PLATE 3—CROSS SECTION O. P. R. & R. E.
MADE AND PRINTED IN U. S. A.
CHARLES BRUNING COMPANY, INC.

BRUNING NO. 605 22821

75-156

0 1 2 3 4 5 INCHES

SH. 24A OF 44

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED	1966	12-66
NO. 24-1	PLOTTED	JHB	3-1-67
	TEMPLATE		
	AREAS	1967	3-1-67
	AREAS CHECKED	JHB/AL	3-21-67

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED	W.C.	11-26-58
NO. 22-1	PLOTTED	C.C.W.	11-26-58
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

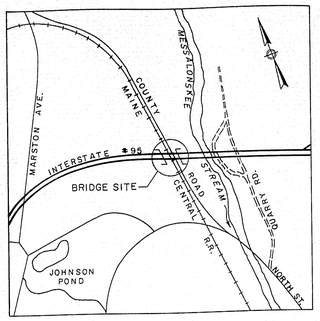
EUREKA NO. 600 2207

PLATE 3—CROSS SECTION o. P. R. & R. E.
MADE AND PRINTED IN U. S. A.
CHARLES BRUNING COMPANY, INC.

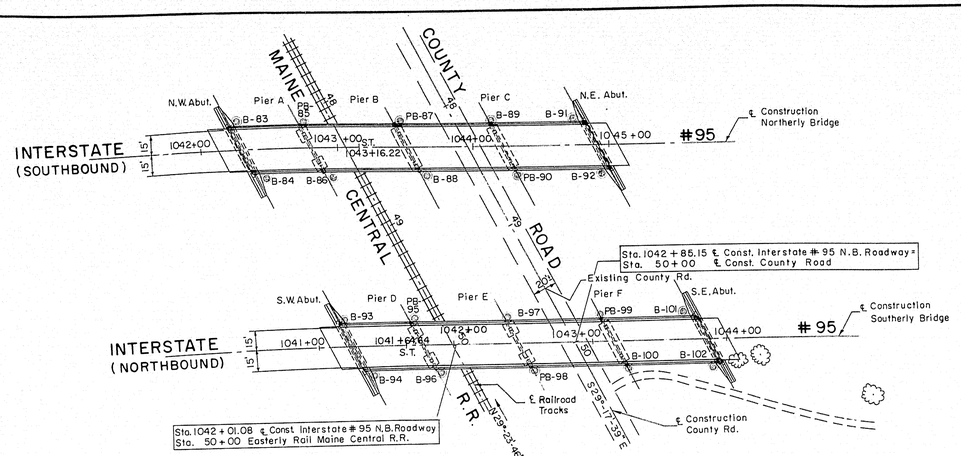
75-158

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	7	12

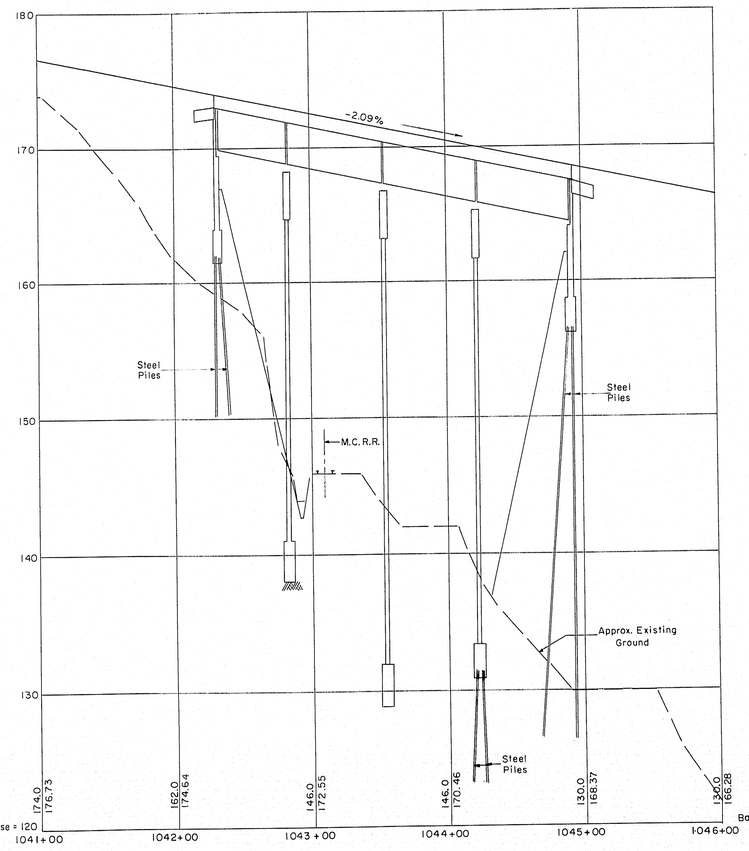
WATERVILLE INTERSTATE



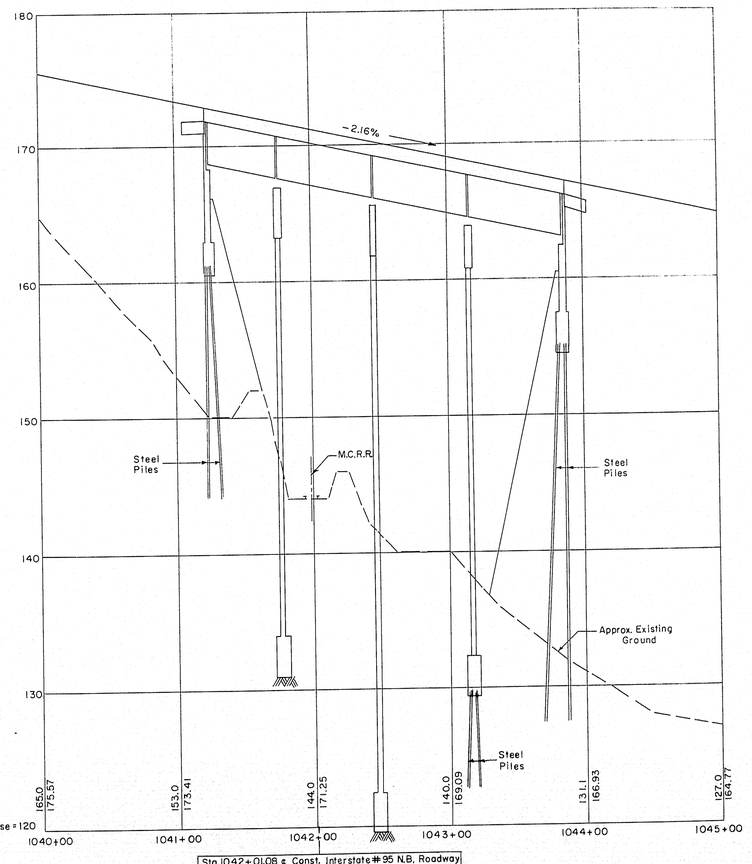
LOCATION MAP
Not to Scale



KEY PLAN
Scale: 1"=50'-0"



PROFILE ALONG INTERSTATE #95 (NORTHERLY BRIDGE)
Scale: Hor. 1"=50'
Vert. 1"= 5'



Sta. 1042+01.08 ℄ Const. Interstate #95 N.B. Roadway
Sta. 50+00 Easterly Rail Maine Central R.R.

PROFILE ALONG INTERSTATE #95 (SOUTHERLY BRIDGE)
Scale: Hor. 1"=50'
Vert. 1"= 5'

GENERAL NOTES

FOUNDATION:
Foundations may be altered, if necessary, to suit conditions encountered in construction.

DESIGN:
In accordance with the Specifications of the American Association of State Highway Officials for H20-S16-44 loading (1957 Edition) modified for military requirements.

Design Stresses: Structural Steel f_s = 18,000 p.s.i.
Reinforcing Steel f_s = 18,000 p.s.i.
Concrete (n=10) f_c = 1,200 p.s.i.

CONSTRUCTION:
State of Maine Standard Specifications to be followed except as noted in Special Provisions.

REINFORCEMENT:
All bars shall have deformations conforming to A.S.T.M. Designation A 305.
Unless otherwise shown on plans, reinforcing bars shall be lapped 20 diameters to make a splice, except that main reinforcing bars near the top of slabs and beams having more than 12" of concrete under the bars shall be lapped 35 diameters to make a splice.

STRUCTURAL STEEL:
Wherever cover plates and / or shear connectors are welded to beams, beams and plates shall be weldable structural steel A.S.T.M. Designation A 373.

BENCH MARK:
BM-46A Top of east rail opposite tel. pole with spike and shiner facing B.M.
Sta. 1042 + 10 (S.B.) 170' Lt.
Elevation 146.63 U.S.G.S. Datum

ESTIMATED QUANTITIES
(NOT GUARANTEED)

STRUCTURAL EARTH EXCAVATION, ABUTMENTS AND RETAINING WALLS	750	CU.YDS.
STRUCTURAL EARTH EXCAVATION, PIERS	890	CU.YDS.
STRUCTURAL ROCK EXCAVATION, PIERS	20	CU.YDS.
GRAVEL BASE COURSE-IN PLACE MEASUREMENT	1460	CU.YDS.
PORTLAND CEMENT CONCRETE, ABUTMENTS AND RETAINING WALLS	320	CU.YDS.
PORTLAND CEMENT CONCRETE, PIERS	420	CU.YDS.
PORTLAND CEMENT CONCRETE, ROADWAY & SIDEWALK SLABS ON STEEL BRIDGES	660	CU.YDS.
PORTLAND CEMENT	2100	BBLS.
BRIDGE DRAINAGE	1	LUMP SUM
STRUCTURAL STEEL, FABRICATED & DELIVERED	626,000	LBS.
STRUCTURAL STEEL, ERECTION	626,000	LBS.
REINFORCING STEEL, DELIVERED	263,200	LBS.
REINFORCING STEEL, PLACING	263,200	LBS.
SHEAR CONNECTORS, DELIVERED & PLACED	1	LUMP SUM
STEEL H-BEAM PILES 42 LBS/FOOT	4,480	LIN.FT.
FRENCH DRAINS	150	CU.YDS.
ALUMINUM RAILING	1050	LIN.FT.
SLOPE PAVING FOR BRIDGES	1520	SQ.YDS.
STRUCTURAL EARTH EXCAVATION - DRAINAGE	20	CU.YDS.
COMMON BORROW	1100	CU.YDS.
OVERHAUL (IN PLACE MEASURE)	3650	CU.YDS.
STRIPPING PITS	140	CU.YDS.
HAND LAID RIPRAP	80	CU.YDS.
LOAM BORROW	180	CU.YDS.
SODDING	40	SQ.YDS.
SEEDING - PARKWAY MIXTURE	19	UNIT
HAY MULCH	2	TON
PROJECT MARKERS	4	EACH

NOTE: 3-Ply Membrane Waterproofing and Bituminous Concrete Surfacing not in this contract.

DESIGN	CHECK H.P	BRIDGE NO
DRAWN V.S.	APPROVED W.A.H-C.J.M	SURVEY PLOT

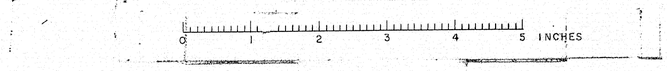
STATE HIGHWAY COMMISSION
INTERSTATE #95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
KEY PLAN & PROFILES

APPROVED BY _____ DATE _____

THE CLARKESON ENGINEERING CO., INC.
CONSULTING ENGINEERS
BOSTON MASSACHUSETTS

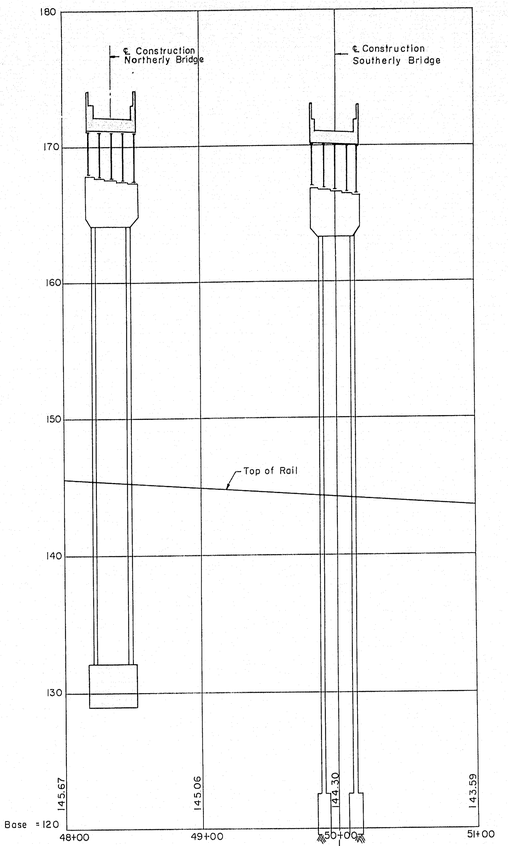
SHEET 1 OF 12 SHEETS AUGUSTA, MAINE

75-108



B. P. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	8	12

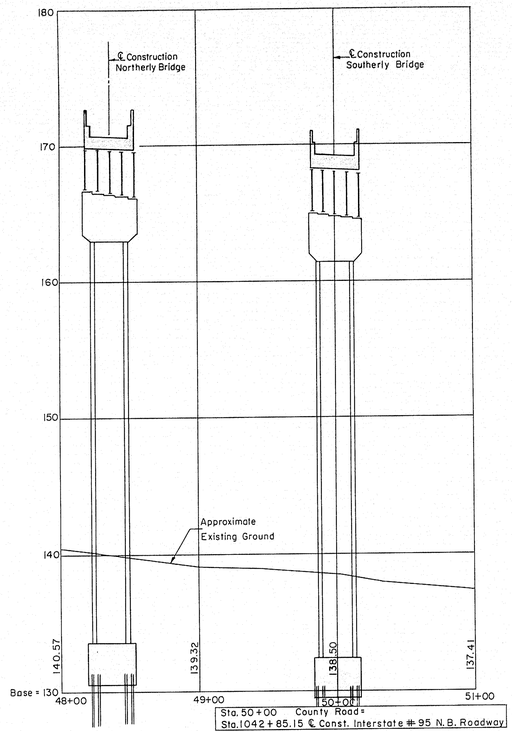
WATERVILLE INTERSTATE



Sta. 50+00 Easterly Rail Maine Central R.R.=
Sta.1042+01.08 ℄ Const. Interstate #95 N.B. Roadway

PROFILE ALONG MAINE CENTRAL R.R.
(EASTERLY RAIL)

Scales: Hor. 1" = 50'-0"
Vert. 1" = 5'-0"



Sta. 50+00 County Road =
Sta.1042+85.15 ℄ Const. Interstate #95 N.B. Roadway

PROFILE ALONG COUNTY ROAD

Scales: Hor. 1" = 50'-0"
Vert. 1" = 5'-0"

BANK DATA

Northerly Bridge	Southerly Bridge	Roadway slope in feet/foot * Left	Right
1042 + 00	1040 + 50	+.0125	-.0175
1042 + 50	1041 + 00	0	-.0175
1043 + 00	1041 + 50	-.00875	-.0175
1043 + 50	1042 + 00	-.0175	-.0175

* + slope is up from P.G.
- slope is down from P.G.

THE CLARKESON ENGINEERING CO., INC.

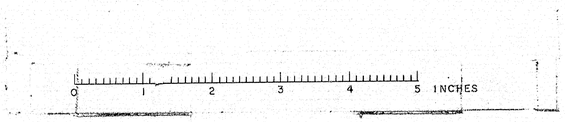
DESIGN	CHECK H.P.	BRIDGE NO.
DRAWN V.S.	APPROVED W.A.H.-C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MAINE CENTRAL R.R. & COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
PROFILES

SHEET 2 OF 12 SHEETS AUGUSTA, MAINE

75-109



B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	9	12

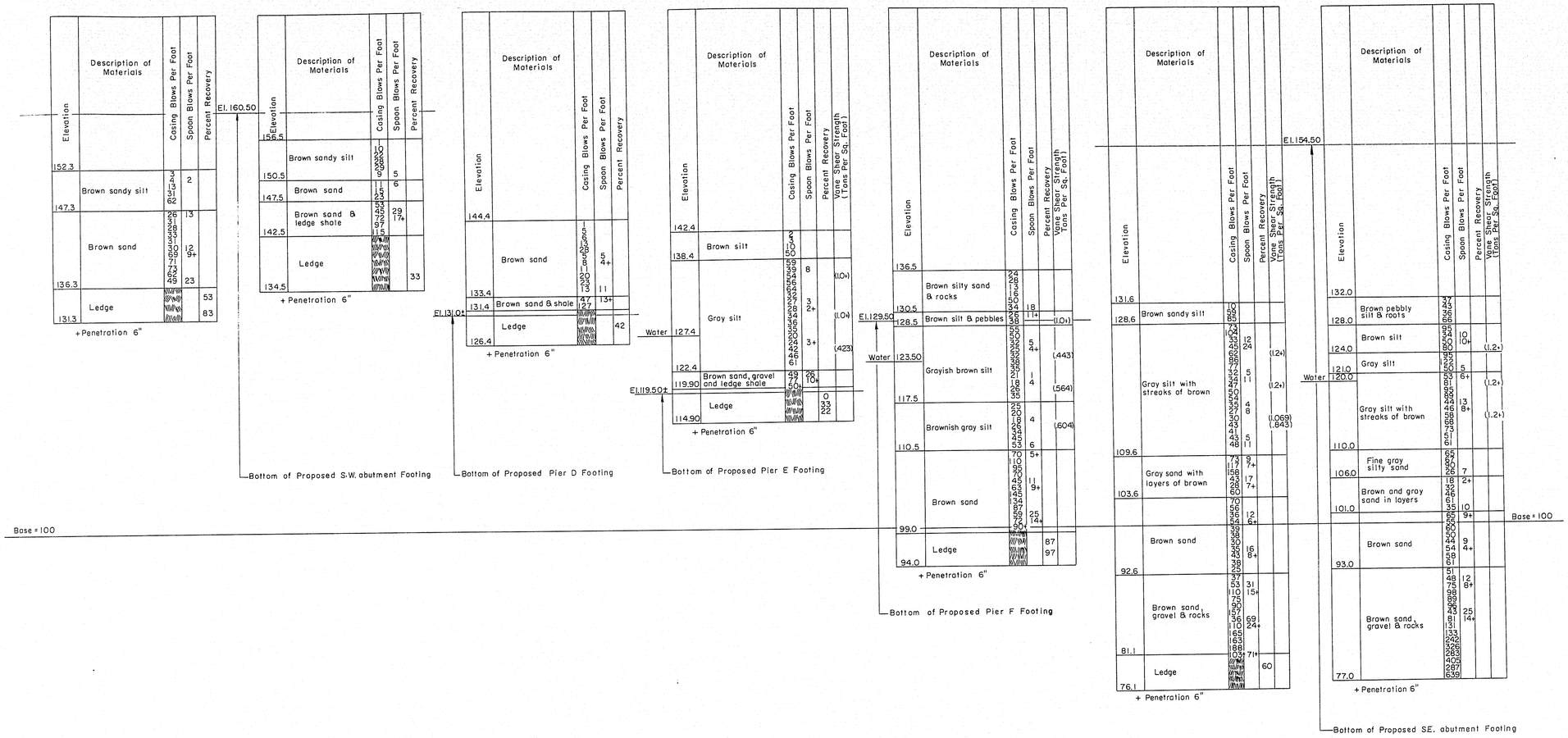
WATERVILLE INTERSTATE

B-83

Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Percent Recovery
158.1				
157.1	Brown silt	8	2	
	Brown sand	1 3 4 3 5 5 5 7 5 7 6 5 5 5 4 3 3 4 3 3 3 4 3 3 3 4 3

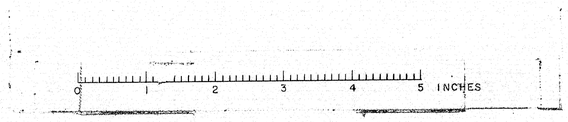
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	10	12

WATERVILLE INTERSTATE



Elev.	Depth in Feet	No. of Blows	Remarks
PB-95			
144.3	4 - 5	31	Exist. Ground
	5 - 6	50	
	6 - 7	55	
	7 - 8	64	
	8 - 9	145	
	9 - 9.5	162	
		Refusal	
PB-98			
140.2	4 - 5	39	Exist. Ground
	5 - 6	50	
	6 - 7	54	
	7 - 8	47	
	8 - 9	84	
	9 - 10	84	
	10 - 11	76	
	11 - 12	61	
	12 - 13	77	
	13 - 14	82	
	14 - 15	78	
	15 - 16	98	
	16 - 17	98	
	17 - 18	77	
	18 - 19	85	
	19 - 20	142	
	20 - 21	142	
	21 - 22	150	
	22 - 22.5	Refusal	
PB-99			
135.5	8 - 9	165	Exist. Ground
	9 - 10	137	
	10 - 11	98	
	11 - 12	95	
	12 - 13	82	
	13 - 14	84	
	14 - 15	96	
	15 - 16	86	
	16 - 17	82	
	17 - 18	92	
	18 - 19	94	
	19 - 20	93	
	20 - 21	103	
	21 - 22	112	
	22 - 23	127	
	23 - 24	118	
	24 - 25	125	
	25 - 26	141	
	26 - 27	142	
	27 - 28	144	
	28 - 29	156	
	29 - 30	144	
	30 - 31	144	
	31 - 32	135	
	32 - 33	120	
	33 - 34	98	
	34 - 35	105	
	35 - 36	112	
	36 - 37	96	
	37 - 38	89	
	38 - 38.5	77	
		Refusal	

SOUTHERLY BRIDGE
BORING LOG
Scale: 1/8" = 1'-0"
For Boring Log notes see Sheet 3



THE CLARKESON ENGINEERING CO., INC.

DESIGN	CHECK H.P	BRIDGE NO.
DRAWN V.S.	APPROVED W.A.H-C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION
INTERSTATE #95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

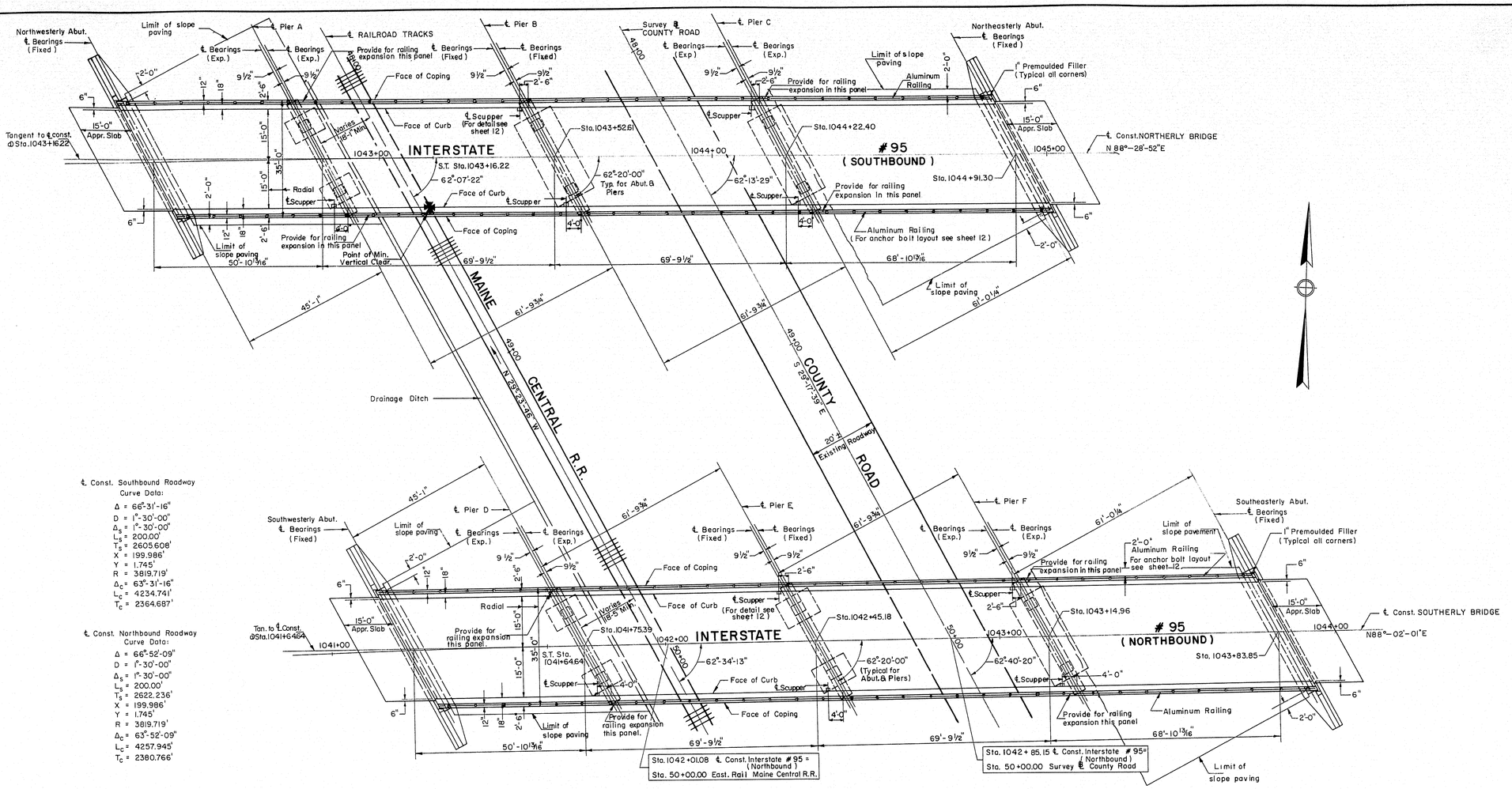
BORING DATA

SHEET 4 OF 12 SHEETS AUGUSTA, MAINE

75-111

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	11	12

WATERVILLE INTERSTATE



GENERAL PLAN

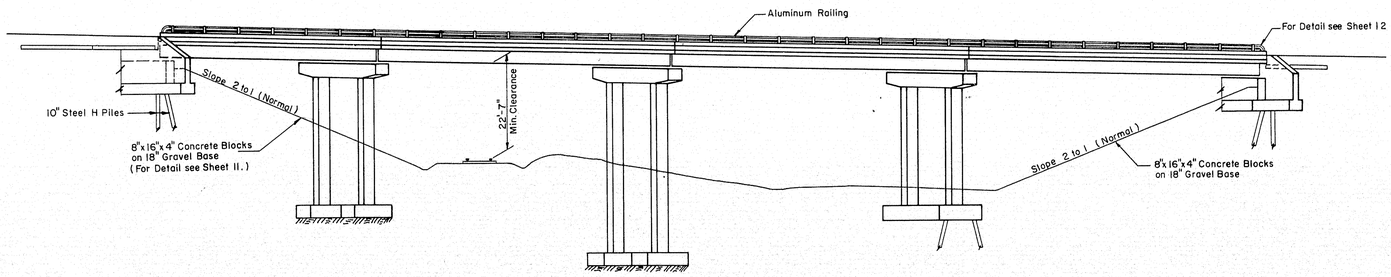
Scale: 1/16" = 1'-0"

℄ Const. Southbound Roadway Curve Data:

- Δ = 66°-31'-16"
- D = 1°-30'-00"
- Δ_s = 1°-30'-00"
- L_s = 200.00'
- T_s = 2605.608'
- X = 199.986'
- Y = 1.745'
- R = 3819.719'
- Δ_c = 63°-31'-16"
- L_c = 4234.741'
- T_c = 2364.687'

℄ Const. Northbound Roadway Curve Data:

- Δ = 66°-52'-09"
- D = 1°-30'-00"
- Δ_s = 1°-30'-00"
- L_s = 200.00'
- T_s = 2622.236'
- X = 199.986'
- Y = 1.745'
- R = 3819.719'
- Δ_c = 63°-52'-09"
- L_c = 4257.945'
- T_c = 2380.766'



GENERAL ELEVATION

Scale: 1/16" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN H.L.	CHECK G.B & H.P.	BRIDGE NO.
DRAWN E.K.	APPROVED W.A.H & C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95 OVER MAINE CENTRAL R.R. & COUNTY ROAD

IN THE CITY OF

WATERVILLE

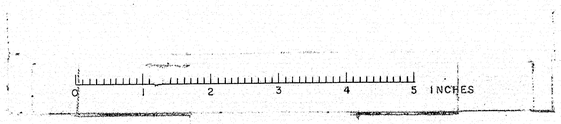
KENNEBEC COUNTY

GENERAL PLAN & ELEVATION

SHEET 5 OF 12 SHEETS AUGUSTA, MAINE

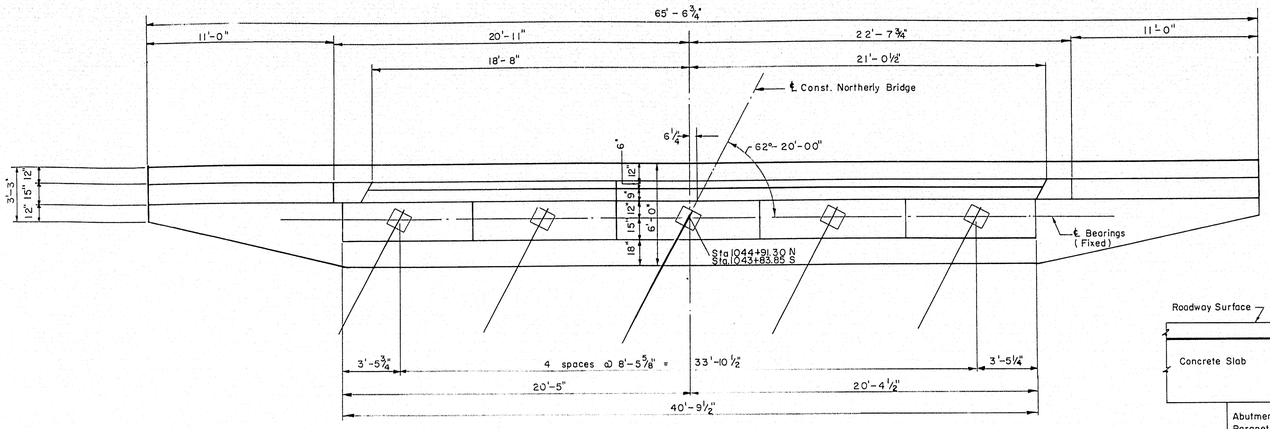
75-112

K+E PHOENIX BLUE 166 D. L. M. INC. 69818



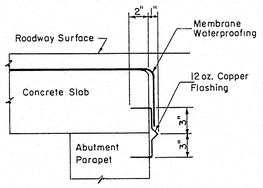
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	12	78.24

WATERVILLE INTERSTATE

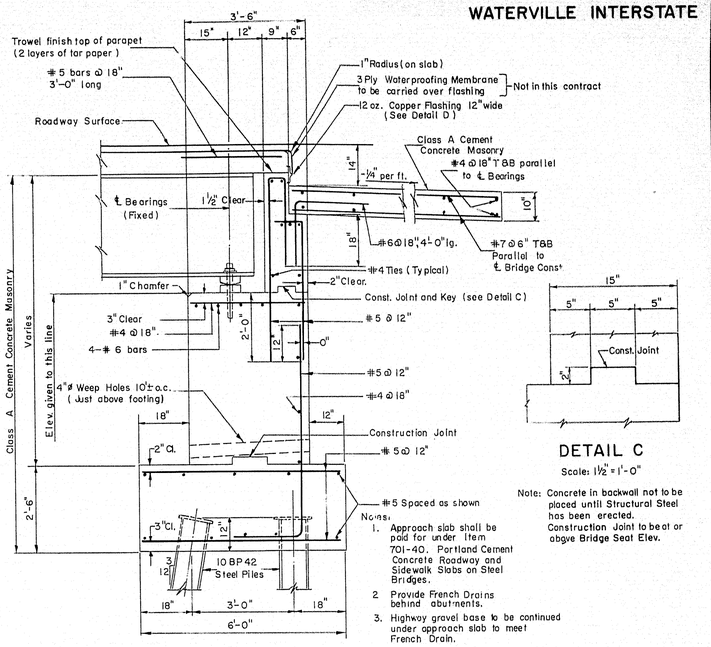


PLAN NORTHEASTERLY ABUTMENT
PLAN SOUTHEASTERLY ABUTMENT SAME

Scale: ½" = 1'-0"



DETAIL D
Scale: 1½" = 1'-0"

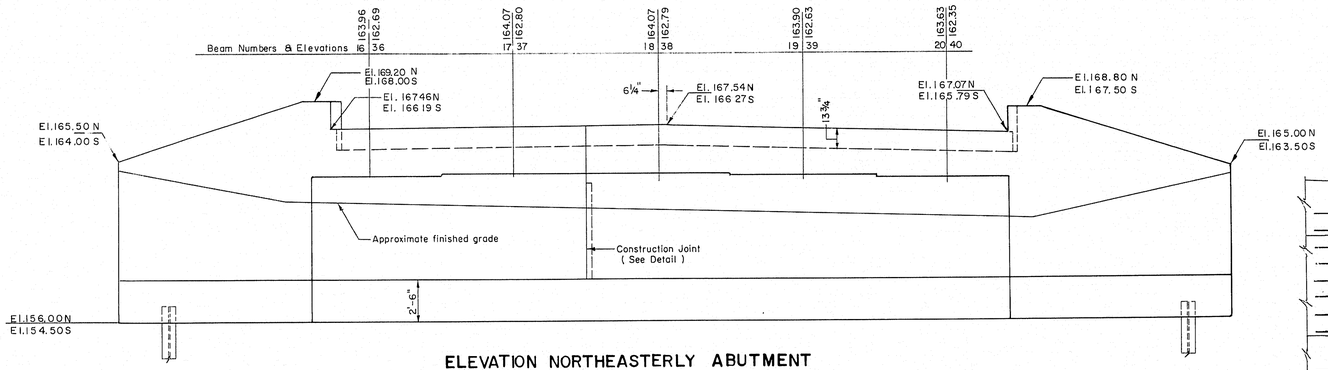


Notes:
1. Approach slab shall be paid for under Item 701-40. Portland Cement Concrete Roadway and Sidewalk Slabs on Steel Bridges.
2. Provide French Drains behind abutments.
3. Highway gravel base to be continued under approach slab to meet French Drain.

TYPICAL ABUTMENT SECTION
Scale: ½" = 1'-0"

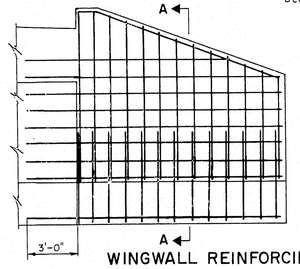
DETAIL C
Scale: 1½" = 1'-0"

Note: Concrete in backwall not to be placed until Structural Steel has been erected. Construction Joint to be at or above Bridge Seat Elev.

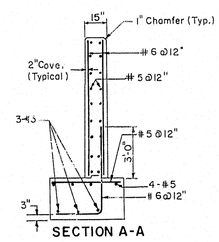


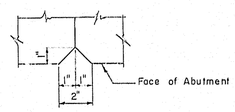
ELEVATION NORTHEASTERLY ABUTMENT
ELEVATION SOUTHEASTERLY ABUTMENT SIMILAR

Scale: ¼" · 1'-0"

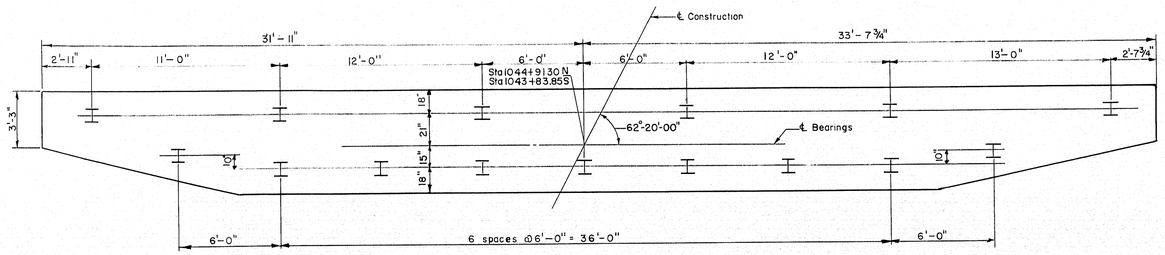


WINGWALL REINFORCING LAYOUT
Scale: ¼" = 1'-0"





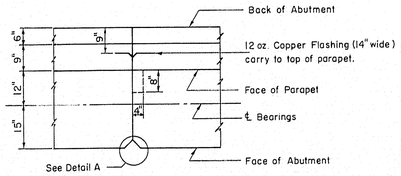
DETAIL A
(CONSTRUCTION JOINT)
Scale: 3" = 1'-0"



PILE PLAN NORTHEASTERLY ABUTMENT
PILE PLAN SOUTHEASTERLY ABUTMENT SAME

Scale: ¼" = 1'-0"

Note: For General Pile Data (See Sheet 7)



ABUTMENT CONSTRUCTION JOINT
Scale: ½" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN	J.T.	CHECK	J.M. - H.P.	BRIDGE NO.
DRAWN	D.A.T.	APPROVED	W.A.H. - C.J.M.	SURVEY PLOT

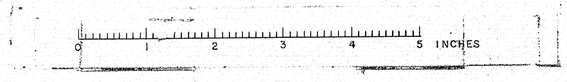
STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
EASTERLY ABUTMENTS

SHEET 6 OF 12 SHEETS — AUGUSTA, MAINE

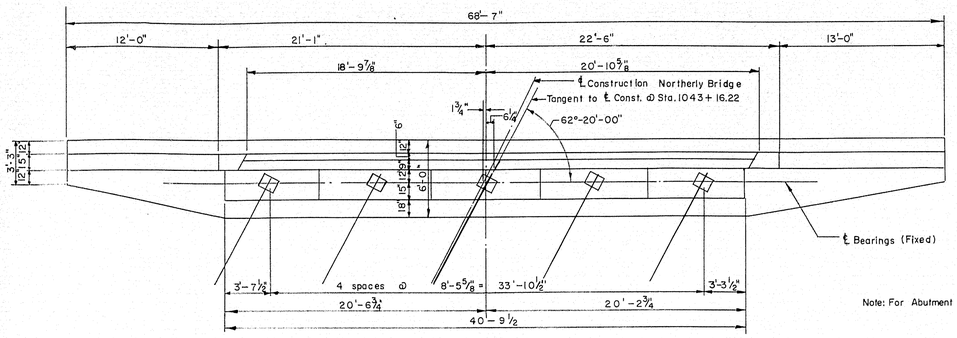
75-113

K+E PHOENIX BLUE 155 @ TRADEM. DUPL. D. L. M. INC. 65810



B. P. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	13	24

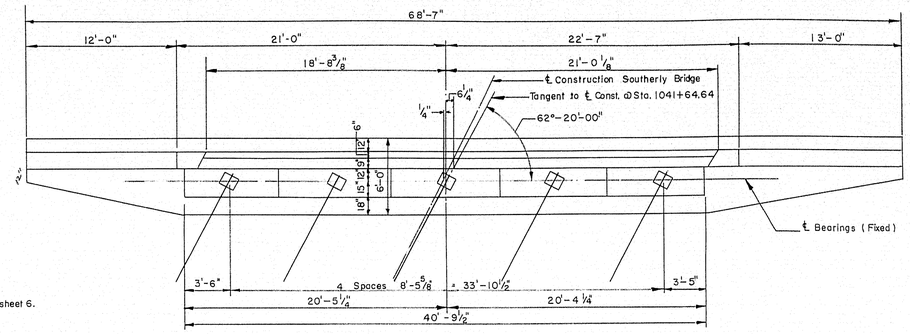
WATERVILLE .INTERSTATE



PLAN NORTHWESTERLY ABUTMENT

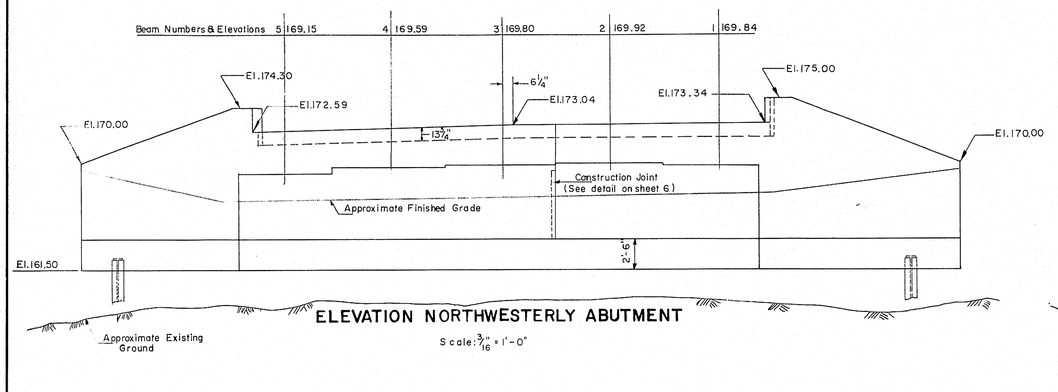
Scale: 3/16" = 1'-0"

Note: For Abutment Section and details see sheet 6.



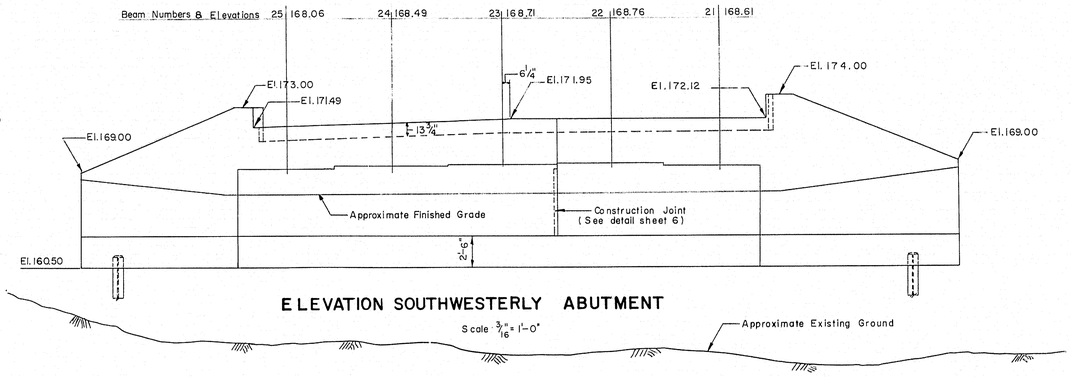
PLAN SOUTHWESTERLY ABUTMENT

Scale: 3/16" = 1'-0"



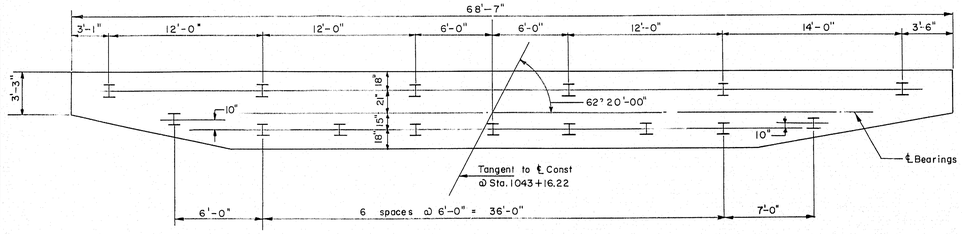
ELEVATION NORTHWESTERLY ABUTMENT

Scale: 3/16" = 1'-0"



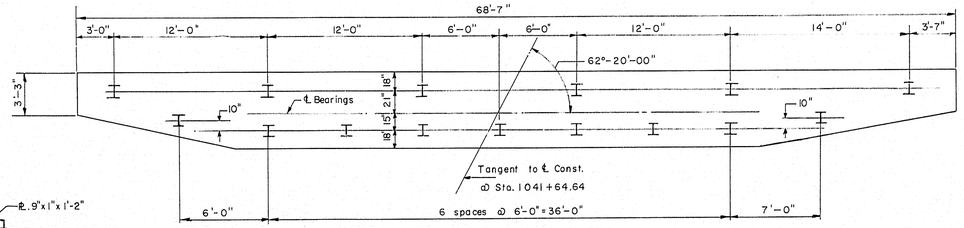
ELEVATION SOUTHWESTERLY ABUTMENT

Scale: 3/16" = 1'-0"



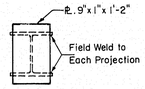
PILE PLAN NORTHWESTERLY ABUTMENT

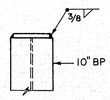
Scale: 3/16"-1'-0"



PILE PLAN SOUTHWESTERLY ABUTMENT

Scale: 3/16" = 1'-0"





PILE CAP DETAILS

Scale: 3/4" = 1'-0"

Notes:

1. All piles to be 10BP42.
2. Maximum pile load = 32 Tons.
3. Front piles to be battered 3 on 12.
4. All piles shall be driven to ledge or practical refusal.
5. Cap all piles (See detail).

THE CLARKESON ENGINEERING CO., INC.			
DESIGN J.T.	CHECK J.M. & H.P.	BRIDGE NO.	
DRAWN D.A.T.	APPROVED WAH- C.J.M.	SURVEY PLOT	

STATE HIGHWAY COMMISSION

INTERSTATE #95

OVER

MAINE CENTRAL R.R.

& COUNTY ROAD

IN THE CITY OF

WATERVILLE

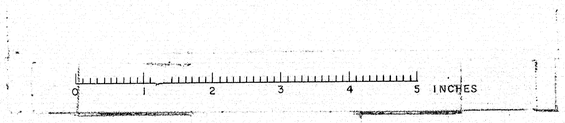
KENNEBEC COUNTY

WESTERLY ABUTMENTS

SHEET 7 OF 12 SHEETS AUGUSTA, MAINE

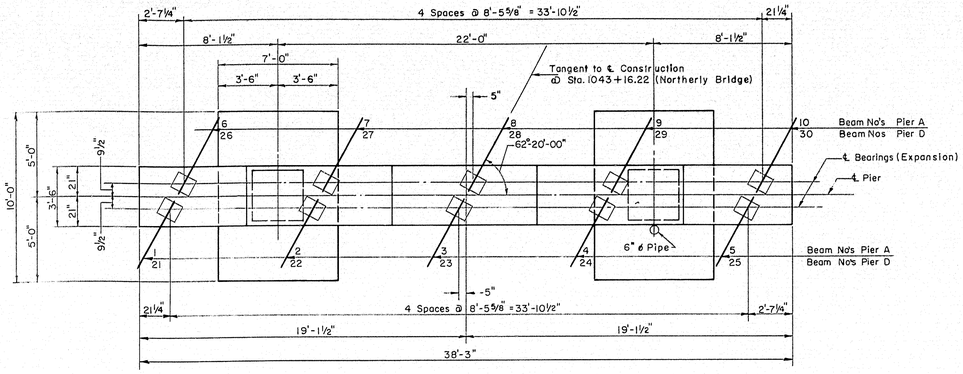
75-114

K+E PRODUCTS BLUE 103 D. L. M. INC. 65818



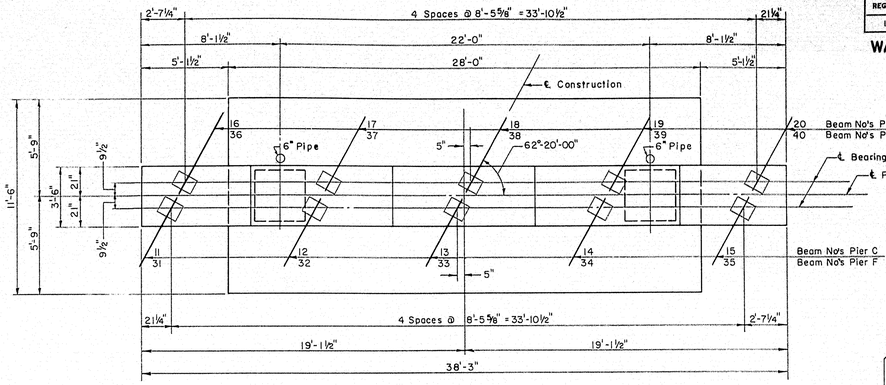
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	14	18

WATERVILLE INTERSTATE



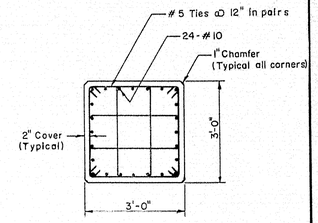
PLAN PIER A
PLAN PIER D SIMILAR

Scale: ¼" = 1'-0"



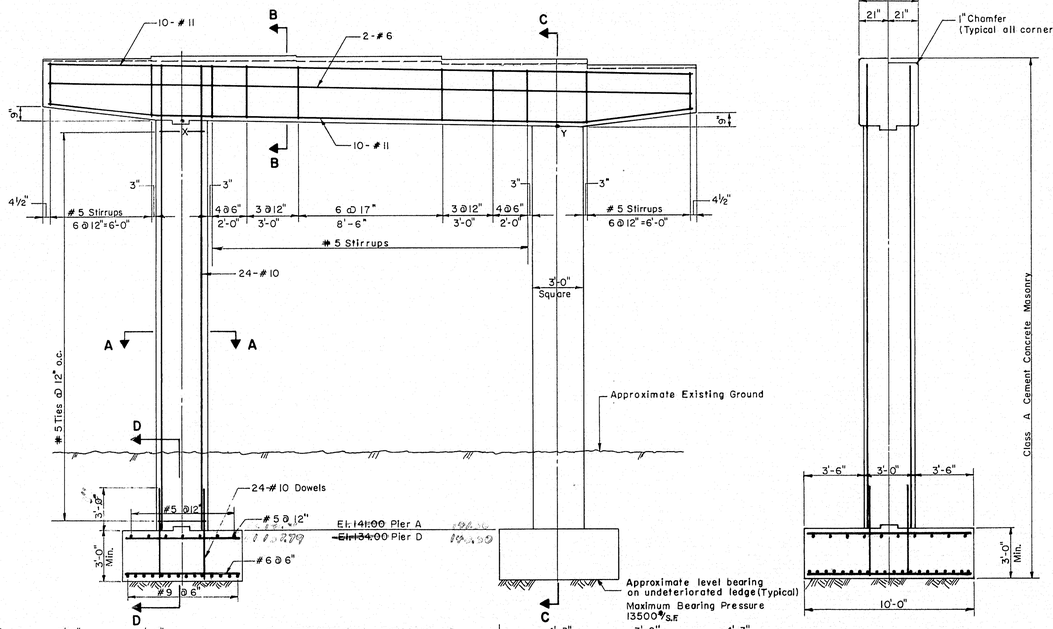
PLAN PIER C
PLAN PIER F SIMILAR

Scale: ¼" = 1'-0"



SECTION A-A

Scale: ½" = 1'-0"

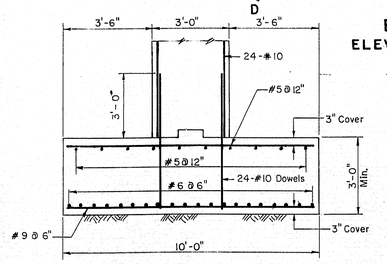


ELEVATION PIER A
ELEVATION PIER D SIMILAR

Scale: ¼" = 1'-0"

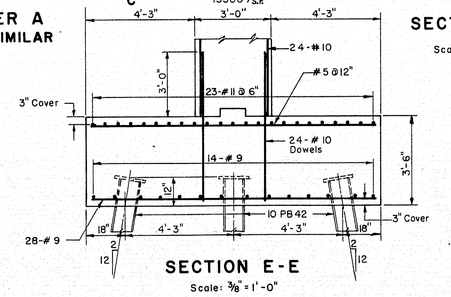
SECTION C-C

Scale: ¼" = 1'-0"



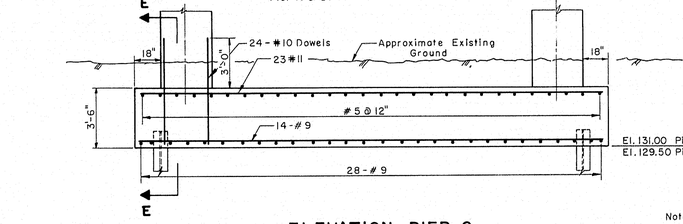
SECTION D-D

Scale: ⅜" = 1'-0"



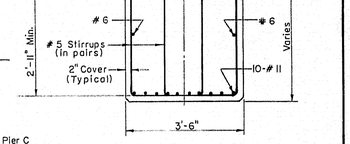
SECTION E-E

Scale: ⅜" = 1'-0"



ELEVATION PIER C
ELEVATION PIER F SIMILAR

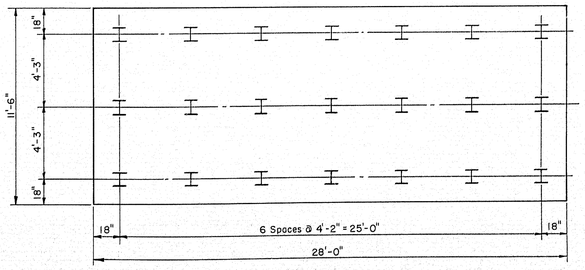
Scale: ¼" = 1'-0"



SECTION B-B

Scale: ½" = 1'-0"

Notes:
1. All piles to be 10BP42.
2. Maximum pile load 35 Tons.
3. Exterior rows of piles battered 2 on 12.
4. All piles shall be driven to ledge or practical refusal.
5. Cap all piles (See Detail on Sheet 7)



PILE PLAN PIER C
PILE PLAN PIER F SIMILAR

Scale: ⅛" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.		
DESIGN D.M.S	CHECK J.I.M.-H.P	BRIDGE NO.
DRAWN E.K.	APPROVED W.A.H.-C.J.M.	SURVEY PLOT

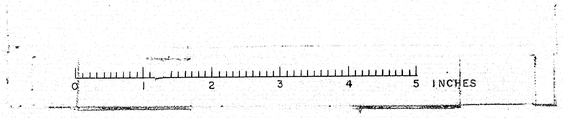
STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MAINE CENTRAL R.R. & COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

PIERS A, C, D & F

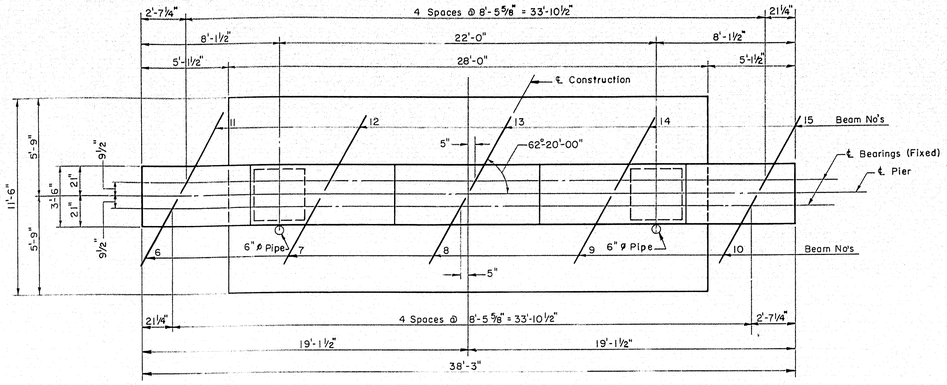
SHEET 8 OF 12 SHEETS — AUGUSTA, MAINE

75-115



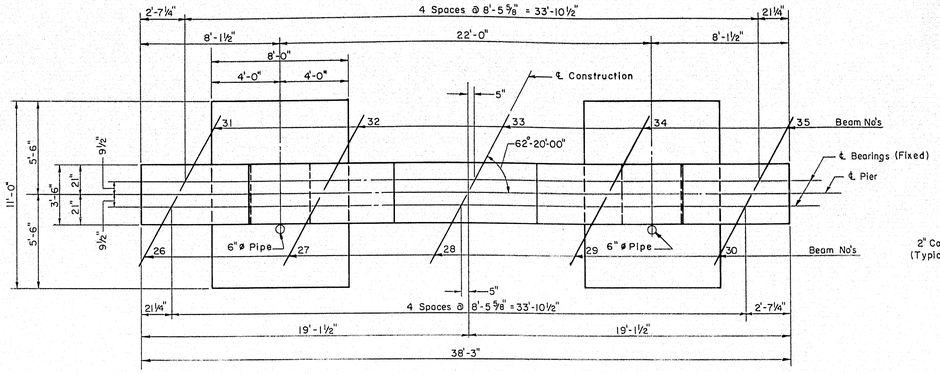
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	15	18

WATERVILLE INTERSTATE



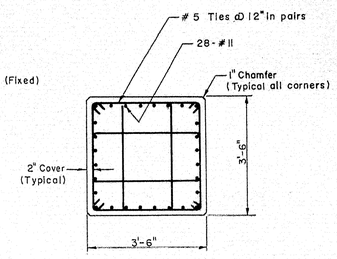
PLAN PIER B

Scale: ¼" = 1'-0"



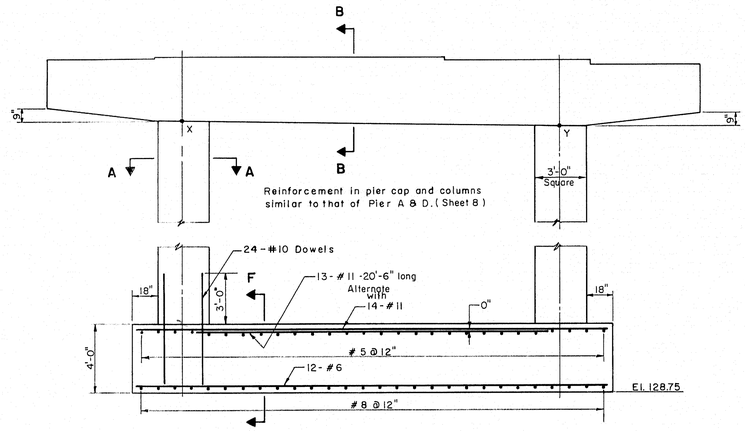
PLAN PIER E

Scale: ¼" = 1'-0"



SECTION H-H

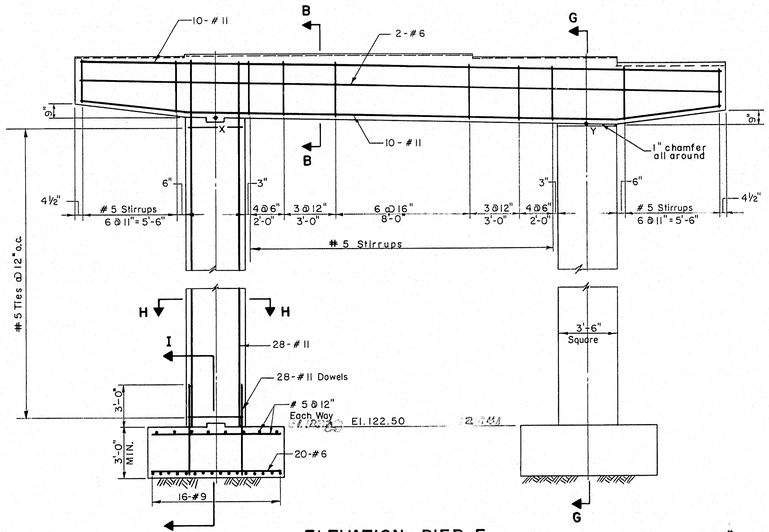
Scale: ½" = 1'-0"



ELEVATION PIER B

Maximum Bearing Pressure 5,200#/S.F.

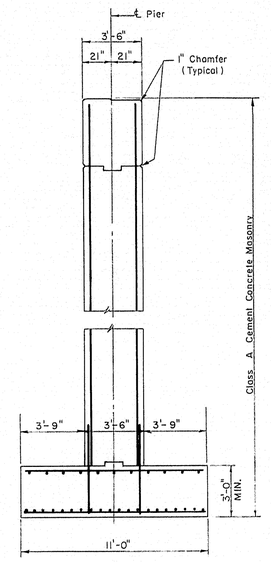
Scale: ¼" = 1'-0"



ELEVATION PIER E

Maximum Bearing Pressure 12,200#/S.F.

Scale: ¼" = 1'-0"

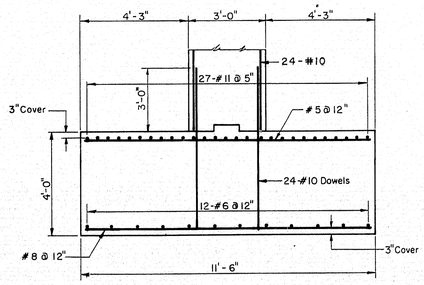


SECTION G-G

Scale: ¼" = 1'-0"

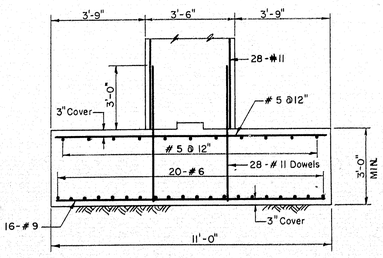
SCHEDULE OF BEAM SEAT ELEVATIONS																	
Beam No.	Pier A		Beam No.	Pier B		Beam No.	Pier C		Beam No.	Beam	Pier D		Beam No.	Pier E		Beam No.	Pier F		Beam No.
1	168.63	168.50	6	166.86	166.83	11	165.42	165.38	16	21	167.40	167.27	26	165.70	165.67	31	164.20	164.16	36
2	168.80	168.45	7	166.98	166.94	12	165.53	165.49	17	22	167.62	167.27	27	165.81	165.77	32	164.31	164.27	37
3	168.75	168.41	8	166.98	166.94	13	165.53	165.49	18	23	167.63	167.28	28	165.81	165.77	33	164.30	164.26	38
4	168.54	168.19	9	166.81	166.77	14	165.36	165.33	19	24	167.41	167.06	29	165.64	165.60	34	164.14	164.10	39
5	168.11	167.98	10	166.54	166.50	15	165.09	165.05	20	25	166.98	166.85	30	165.37	165.33	35	163.86	163.82	40

ELEVATION AT TOP OF COLUMNS		
Pier	Elevation	
	X	Y
A	165.00	164.50
B	163.30	163.00
C	161.90	161.50
D	163.70	163.30
E	162.10	161.80
F	160.60	160.30



SECTION F-F

Scale: ⅜" = 1'-0"



SECTION I-I

Scale: ⅜" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN D.M.S.	CHECK J.I.M. - H.P.	BRIDGE NO.
DRAWN E.K.	APPROVED W.A.H. - C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

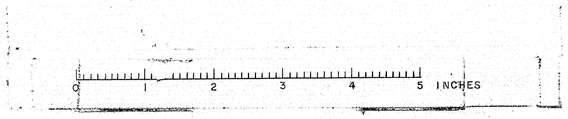
INTERSTATE #95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD

IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

PIERS B & E

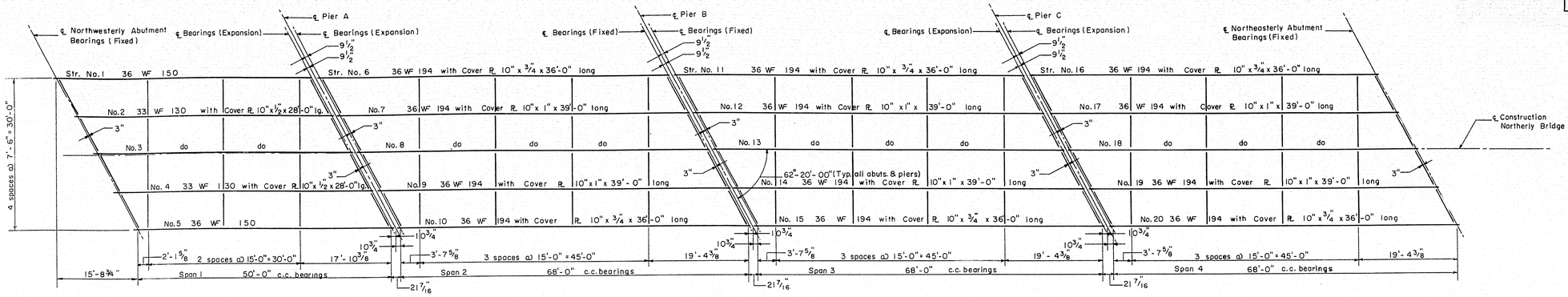
SHEET 9 OF 12 SHEETS AUGUSTA, MAINE

75-116



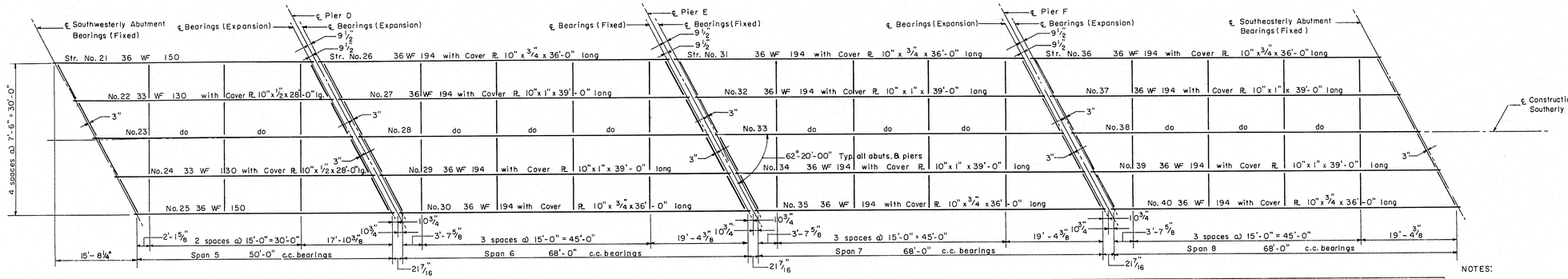
B. P. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	16	24

WATERVILLE INTERSTATE



FRAMING PLAN NORTHERLY BRIDGE

Scale: 3/32" = 1'-0"



FRAMING PLAN SOUTHERLY BRIDGE

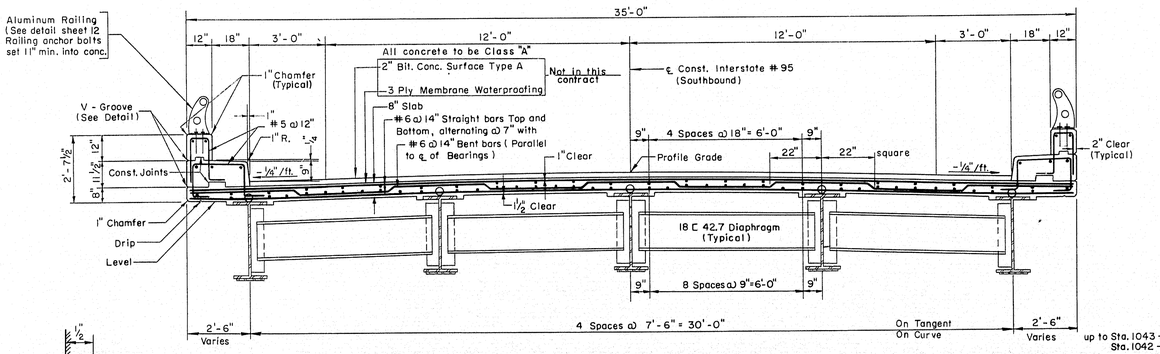
Scale: 3/32" = 1'-0"

ELEVATIONS OF BOTTOM OF ROADWAY SLAB

Beam No.	℄ Brg.	⅛ Point	¼ Point	⅜ Point	℄ Brg.	Beam No.	℄ Brg.	⅛ Point	½ Point	¾ Point	℄ Brg.
1	173.38	173.11	172.82	172.51	172.17	21	172.15	171.88	171.59	171.27	170.94
2	173.24	173.00	172.73	172.43	172.12	22	172.08	171.83	171.56	171.26	170.94
3	173.12	172.89	172.64	172.37	172.07	23	172.03	171.79	171.53	171.25	170.95
4	172.91	172.68	172.43	172.16	171.86	24	171.81	171.59	171.32	171.04	170.73
5	172.69	172.46	172.21	171.94	171.65	25	171.60	171.36	171.10	170.82	170.52
6	172.13	171.79	171.40	170.97	170.50	26	170.90	170.57	170.20	169.79	169.34
7	172.08	171.78	171.43	171.04	170.61	27	170.90	170.60	170.26	169.87	169.44
8	172.04	171.74	171.41	171.02	170.60	28	170.91	170.60	170.26	169.87	169.44
9	171.82	171.54	171.22	170.85	170.44	29	170.69	170.40	170.07	169.69	169.27
10	171.61	171.31	170.98	170.59	170.17	30	170.48	170.17	169.82	169.43	169.00
11	170.46	170.17	169.84	169.46	169.05	31	169.30	168.98	168.65	168.26	167.83
12	170.57	170.28	169.95	169.57	169.16	32	169.40	169.10	168.76	168.36	167.94
13	170.57	170.28	169.95	169.57	169.16	33	169.40	169.09	168.75	168.36	167.93
14	170.41	170.11	169.79	169.41	168.99	34	169.23	168.93	168.59	168.19	167.77
15	170.13	169.84	169.51	169.13	168.72	35	168.96	168.65	168.31	167.92	167.49
16	169.01	168.72	168.38	168.01	167.59	36	167.79	167.49	167.14	166.75	166.32
17	169.12	168.83	168.49	168.12	167.70	37	167.90	167.59	167.25	166.86	166.43
18	169.12	168.82	168.49	168.11	167.70	38	167.89	167.59	167.25	166.85	166.42
19	168.96	168.66	168.33	167.95	167.53	39	167.73	167.42	167.08	166.69	166.26
20	168.68	168.39	168.05	167.68	167.26	40	167.45	167.15	166.80	166.41	165.98

NOTES:

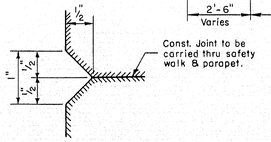
1. All intermediate diaphragms to be 18 C 42.7, for detail see Sheet 11.
2. All end diaphragms to be 15 C 33.9, for details see Sheet 11.
3. For Cover Plate and Shear Connector details see Sheet 11.
4. All beams to be cambered to the extent that the bridge deck under full dead load will follow as nearly as practicable the design profile and in no case with less camber than is likely to remain permanent. The proposed camber diagram shall be submitted to the Engineer for approval.
5. Parapets and safety walks to have transverse construction joints 20'± on centers. Joints are not to be located under railing post. Contact surfaces of joints to be painted with a bituminous material. Exposed surfaces are to be chamfered ½" Reinforcing steel to be carried thru joints.
6. All concrete in deck slab of each span shall be placed in one continuous operation.
7. 3-Ply Membrane Waterproofing and Bituminous Concrete Surfacing are not in this contract.
8. Top flange of stringers to be cut parallel to ℄ bearings.



TYPICAL CROSS SECTION

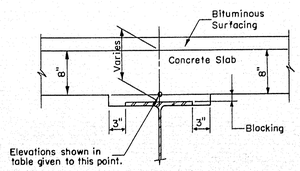
Scale: 3/8" = 1'-0"

Notes:
1. All longitudinal reinforcing to be # 4 Bars spaced as shown (Parallel to ℄ Construction)
2. Normal cross section as shown from Sta. 1043+50 Northerly Bridge and Sta. 1042+00 Southerly Bridge. Banked section up to these stations (see Bank Data on Sheet 2)



V-GROOVE DETAIL

Not to Scale



DETAIL OF HAUNCH

Scale: 1" 0"

NOTE:
After the structural steel is erected and before forms are built or concrete is placed elevations on the top flange of the beams are to be obtained at the points indicated in the table. The difference between these elevations and those shown in the table give the actual blocking distance from top of beam to bottom of slab. See Haunch Detail.

THE CLARKESON ENGINEERING CO., INC.

DESIGN J.I.M.	CHECK J.T. - H.P.	BRIDGE NO. SURVEY
DRAWN J.T - V.S.	APPROVED W.A.H. - C.J.M.	PLOT

STATE HIGHWAY COMMISSION

INTERSTATE # 95
OVER
MAINE CENTRAL R.R. & COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

FRAMING PLAN & TYPICAL CROSS SECTION

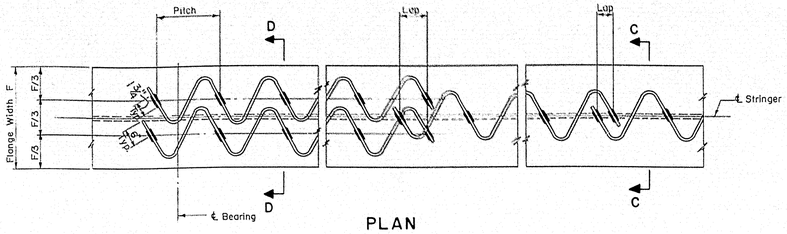
SHEET 10 OF 12 SHEETS AUGUSTA, MAINE

75-117

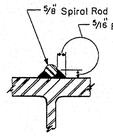
K&E PHOENIX BLUE 185 D. L. M. INC.

B.P.R. REG. NO	STATE	PROJECT NO.	SHEET NO	TOTAL SHEETS
1	MAINE	1-95-6(23)	17	1824

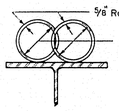
WATERVILLE INTERSTATE



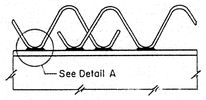
PLAN



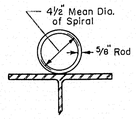
DETAIL A



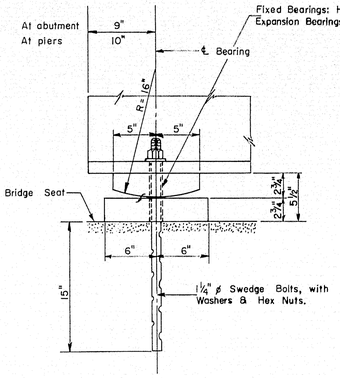
SECTION D-D



ELEVATION

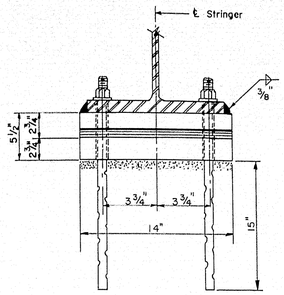


SECTION C-C

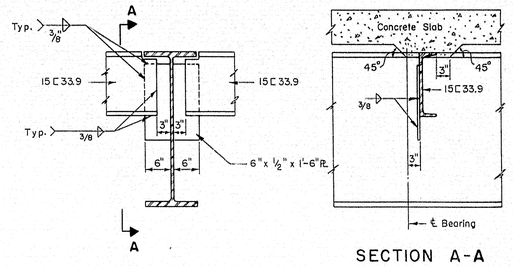


EXPANSION & FIXED BEARING DETAIL

Scale: 1½" = 1'-0"



Note: All anchor bolts to be centered true before bearing plates are set in position.

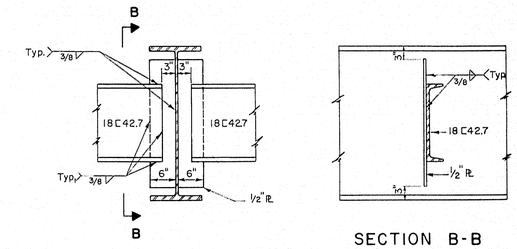


SECTION A-A

WELDED END DIAPHRAGM CONNECTION

Scale: ¾" = 1'-0"

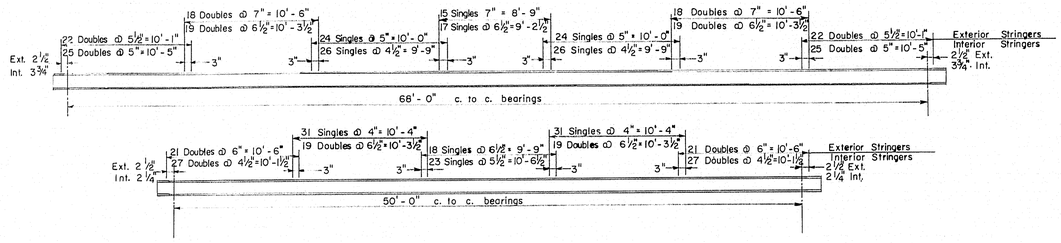
Note: Welds to be shop or field welded.



SECTION B-B

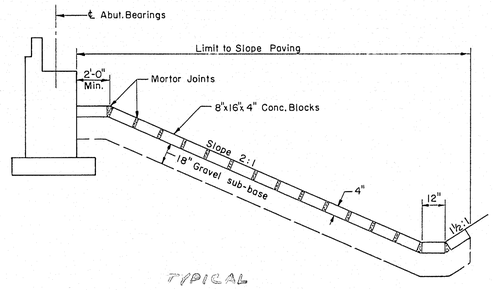
WELDED DIAPHRAGM CONNECTION

Scale: ¾" = 1'-0"



TYPICAL SPIRAL SHEAR CONNECTORS
(DETAILS & LAYOUT)

NOT TO SCALE

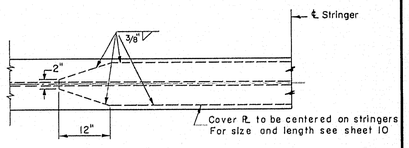


TYPICAL

SLOPE PAVING DETAIL
(WESTERLY ABUTMENTS)

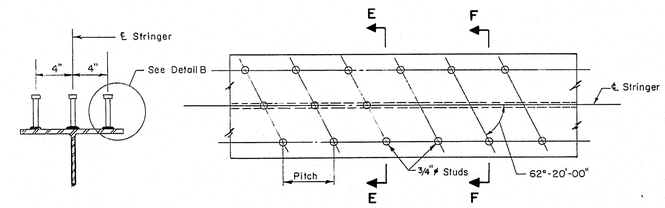
Not to Scale

~~Notes: At Easterly Abutments stop slope paving at existing ground.~~



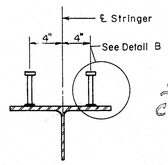
COVER PLATE DETAIL

NOT TO SCALE



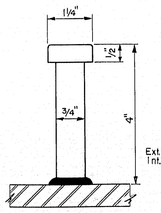
SECTION E-E

PLAN

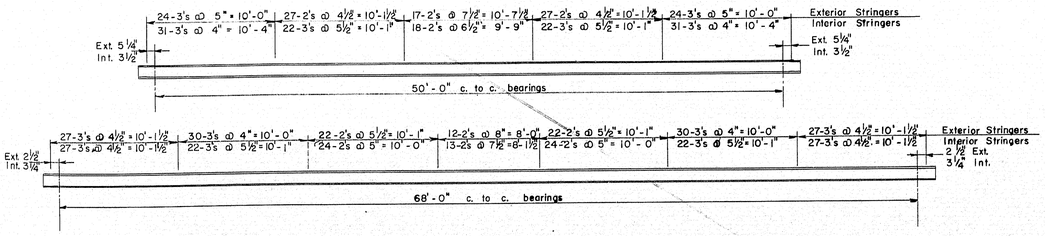


SECTION F-F

SPIRAL SHEAR CONNECTORS USED

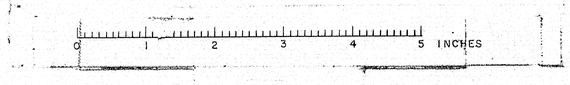


DETAIL B



TYPICAL STUD SHEAR CONNECTORS
(DETAILS & LAYOUT)

NOT TO SCALE



THE CLARKESON ENGINEERING CO., INC.

DESIGN R.F. - J.T.	CHECK J.I.M. - H.R.	BRIDGE NO.
DRAWN E.K.	APPROVED W.A.H. - C.J.M	SURVEY PLOT

STATE HIGHWAY COMMISSION

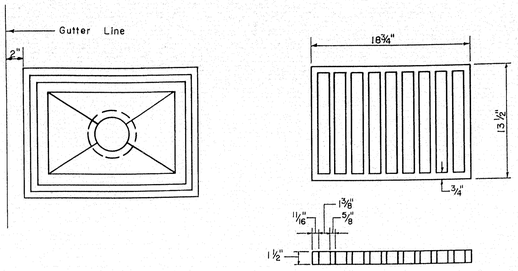
INTERSTATE #95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
SUPERSTRUCTURE DETAILS

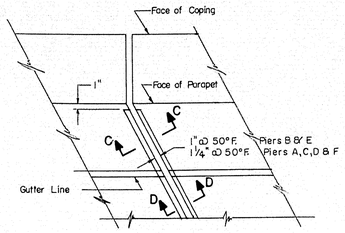
SHEET 11 OF 12 SHEETS AUGUSTA, MAINE

75-118

B. R. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	18	18

WATERVILLE INTERSTATE





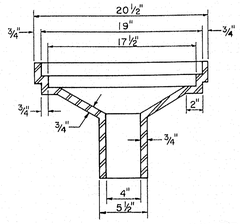
FIXED & EXPANSION JOINT PLAN

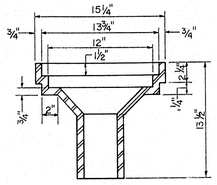
Scale: 1" = 1'-0"

Note:
All welds to be ⅜" fillets.

SAFETY WALK

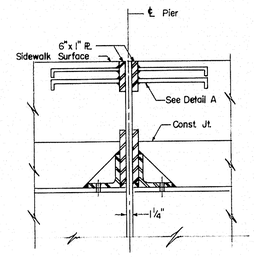
Scale: 1" = 1'-0"





SCUPPER DETAILS

Scale: 1½" = 1'-0"

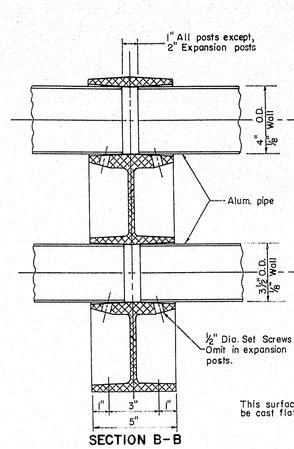


SECTION C-C

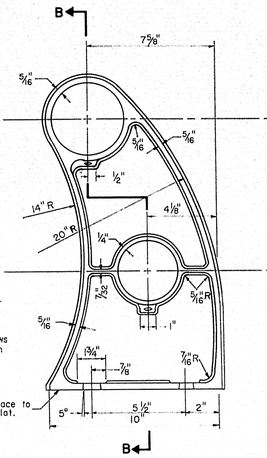
Scale: 1" = 1'-0"

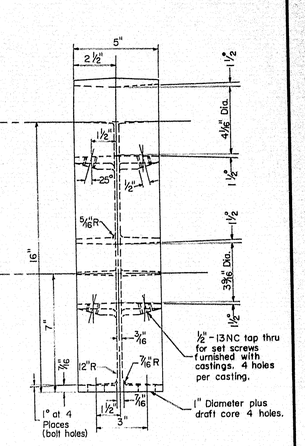
SECTION D-D

Scale: 1" = 1'-0"



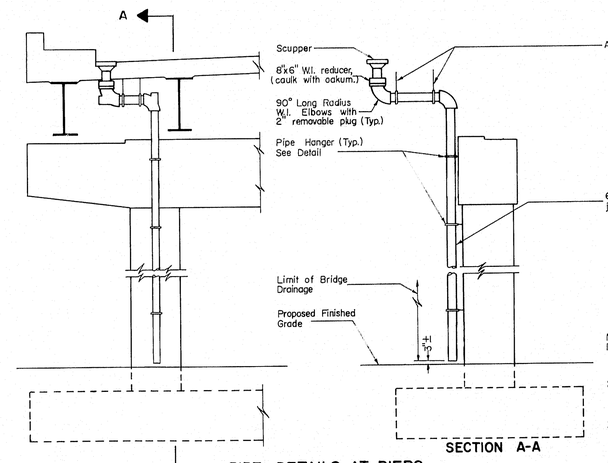
SECTION B-B





ALUMINUM RAIL DETAILS

Scale: 3" = 1'-0"

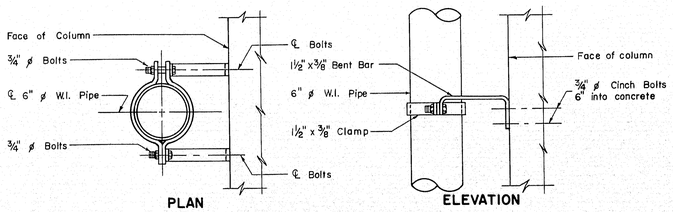


SECTION A-A

PIPE DETAILS AT PIERS

Scale: ¼" = 1'-0"

Notes:
1. Piping to be behind pier column out of sight of traffic.
2. All pipes and fittings to be W.I. standard weight with horizontal runs on 2% grade.
3. All joints to be welded except as shown.
4. For location of scuppers see sheet 5
5. The contractor shall submit complete drawings of the piping system to the Engineer for approval.



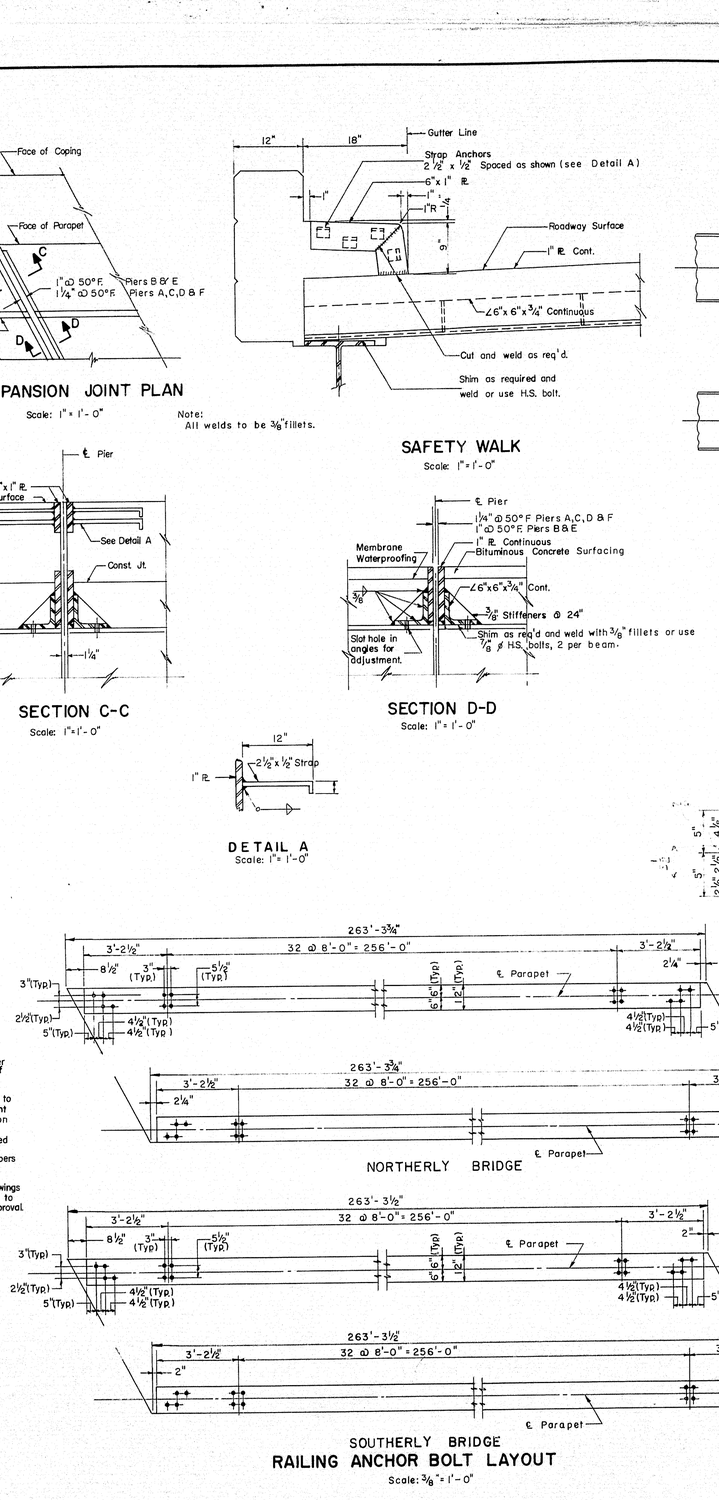
PLAN ELEVATION

PIPE HANGER DETAILS

Scale: 1½" = 1'-0"

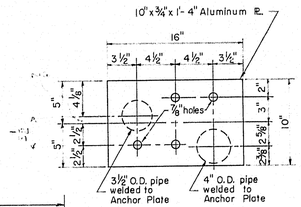
DETAIL A

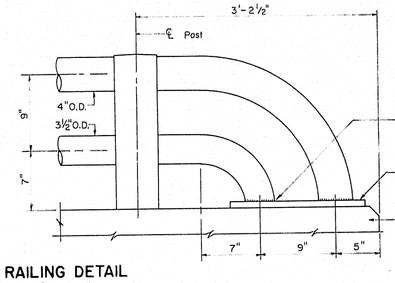
Scale: 1" = 1'-0"



RAILING ANCHOR BOLT LAYOUT

Scale: ⅜" = 1'-0"



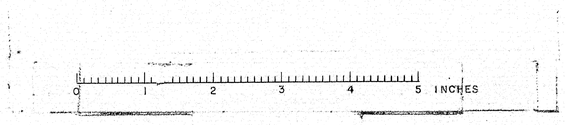


END RAILING DETAIL

Scale: 1½" = 1'-0"

Note: 1. Any variation in railing dimensions shall be submitted for approval.
2. All anchor bolts, nuts, and washers to be aluminum alloy.
3. All anchor bolts to be ¾" ø bolts set 11" into concrete.

Note: 3-Ply Membrane Waterproofing and Bituminous Concrete Surfacing not in this contract.



THE CLARKESON ENGINEERING CO., INC.

DESIGN J.I.M.	CHECK J.T.-H.R	BRIDGE NO. SURVEY
DRAWN R.E.M.	APPROVED WAH-C.J.M.	PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MAINE CENTRAL R.R. & COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

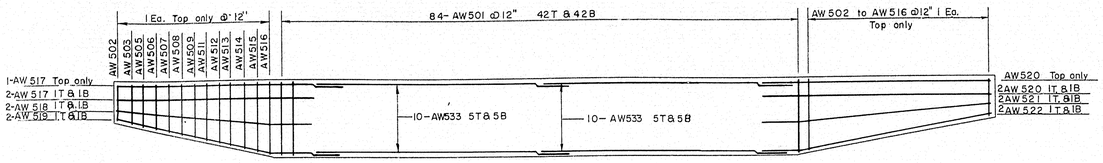
DETAILS

SHEET 12 OF 12 SHEETS AUGUSTA, MAINE

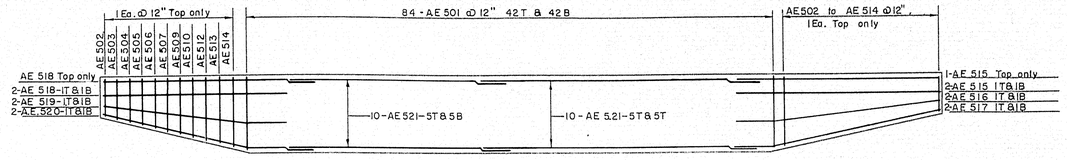
75-119

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	19	24

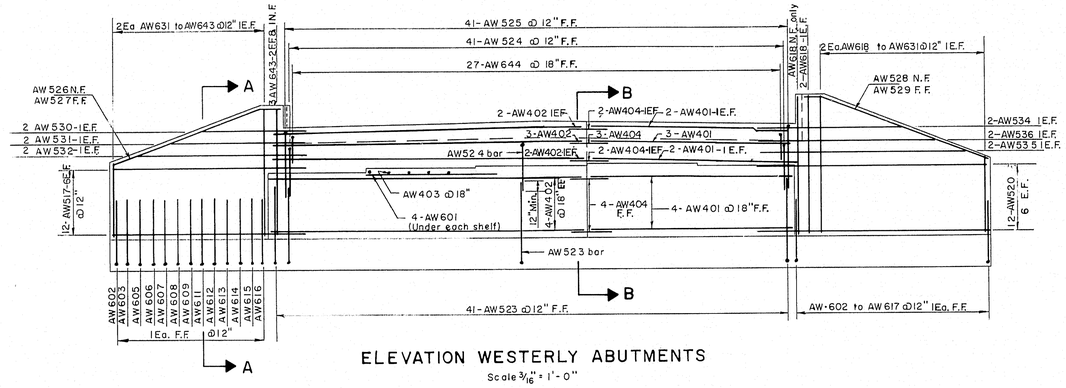
WATERVILLE INTERSTATE



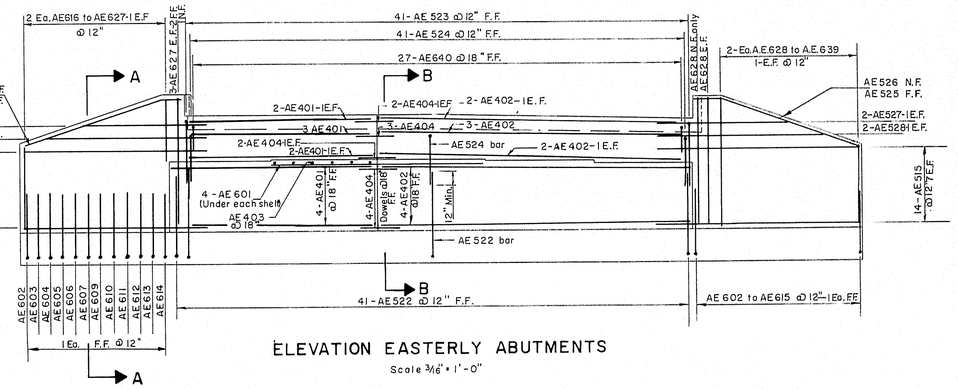
PLAN WESTERLY ABUTMENTS
Scale 3/16" = 1'-0"



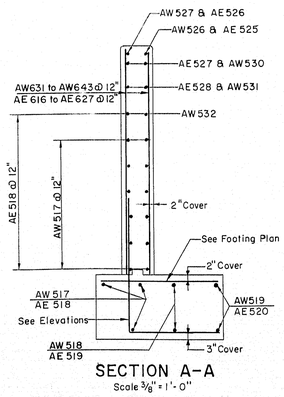
PLAN EASTERLY ABUTMENTS
Scale 3/16" = 1'-0"



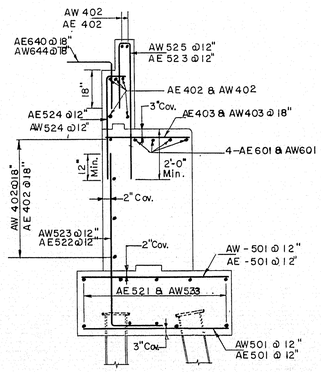
ELEVATION WESTERLY ABUTMENTS
Scale 3/16" = 1'-0"



ELEVATION EASTERLY ABUTMENTS
Scale 3/16" = 1'-0"



SECTION A-A
Scale 3/8" = 1'-0"



SECTION B-B
Scale 3/8" = 1'-0"

NOTE: Bars Prefixed AW are for Westerly Abutments.
Bars Prefixed AE are for Easterly Abutments.

ESTIMATED QUANTITIES

WESTERLY ABUTMENTS	9,779 LBS.
EASTERLY ABUTMENTS	9,443 LBS.

THE CLARKESON ENGINEERING CO., INC.

DESIGN G.B.	CHECK H.L.	BRIDGE NO.
DRAWN F.E.T.	APPROVED WAH-CJM	SURVEY PLOT

STATE HIGHWAY COMMISSION

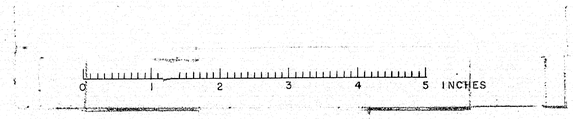
INTERSTATE #95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD

IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
ABUTMENT REINFORCMENT

SHEET 1 OF 6 SHEETS — AUGUSTA, MAINE

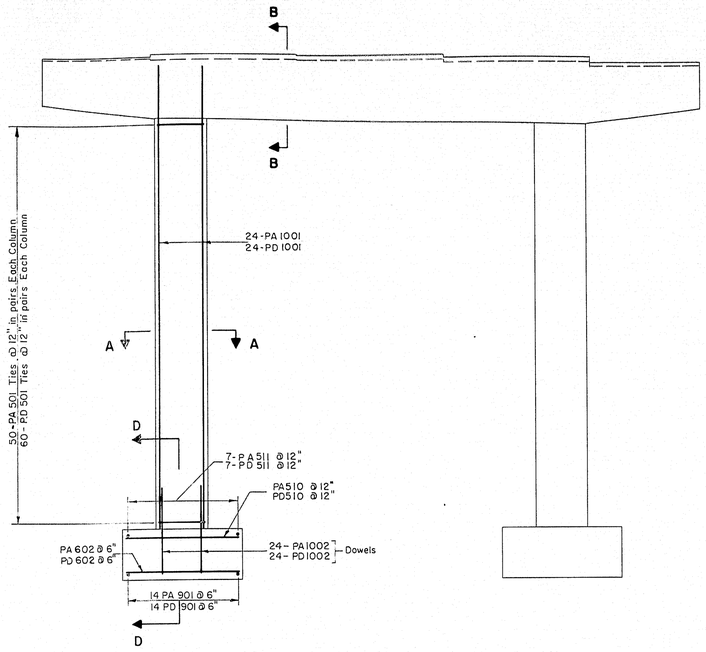
75-120

K-E PHOENIX BLUE 160 D. L. M. INC. 68819



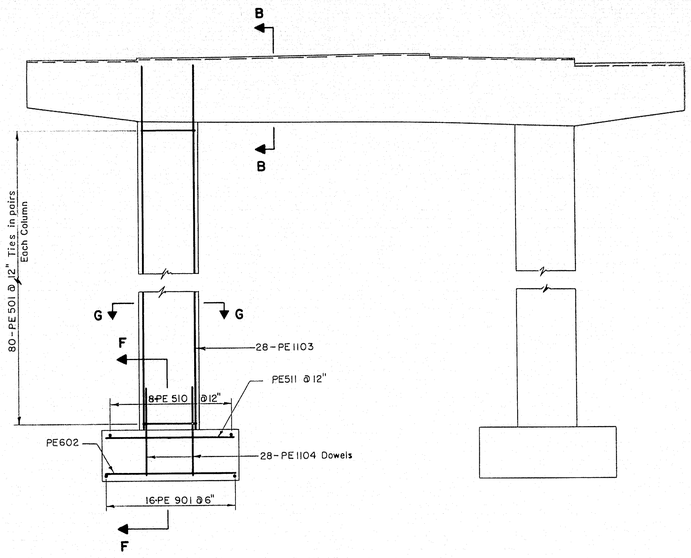
B. P. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	20	24

WATERVILLE INTERSTATE



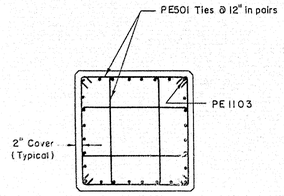
ELEVATION PIER A
ELEVATION PIER D SIMILAR

Scale: 1/4" = 1'-0"



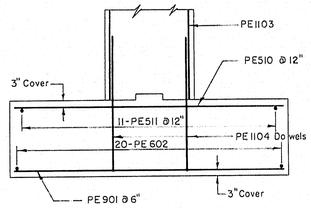
ELEVATION PIER E

Scale: 1/4" = 1'-0"



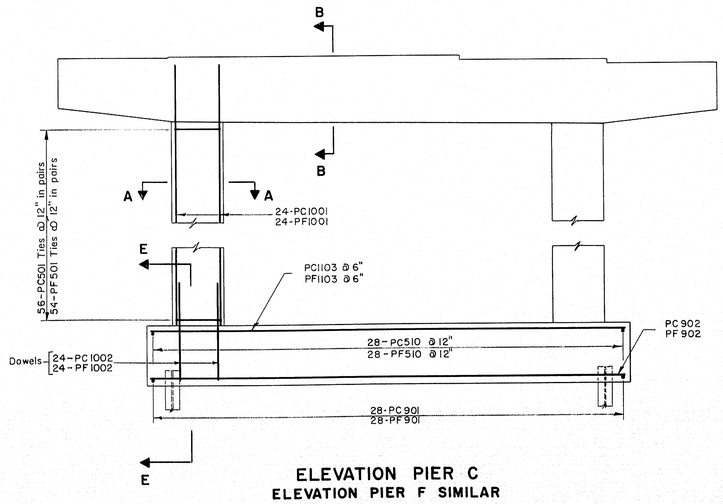
SECTION G-G

Scale: 1/2" = 1'-0"



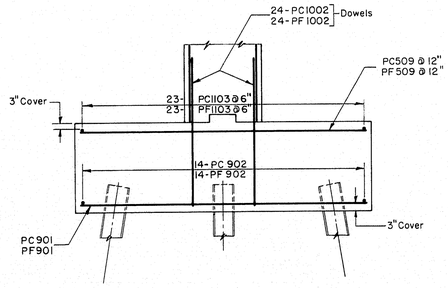
SECTION F-F

Scale: 3/8" = 1'-0"



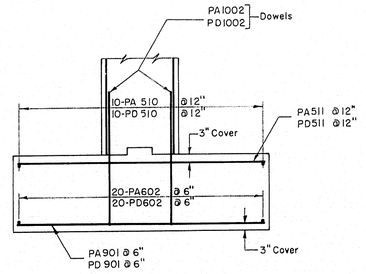
ELEVATION PIER C
ELEVATION PIER F SIMILAR

Scale: 1/4" = 1'-0"



SECTION E-E

Scale: 3/8" = 1'-0"



SECTION D-D

Scale: 3/8" = 1'-0"

ESTIMATED QUANTITIES

PIER A	14,294 LBS.
PIER C	19,765 LBS.
PIER D	15,704 LBS.
PIER E	23,312 LBS.
PIER F	19,776 LBS

Note: For Sections A-A & B-B See Sheet 3.
For reinforcement in caps See Sheet 3.
Bars prefixed PA, PB, PC, PD, PE, & PF are for Piers A, B, C, D, E & F respectively.

THE CLARKESON ENGINEERING CO., INC.

DESIGN G.B	CHECK H.L.	BRIDGE NO.
DRAWN E.K.	APPROVED W.A.H.-C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MAINE CENTRAL R.R. & COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

PIERS A,C,D,E & F REINFORCEMENT

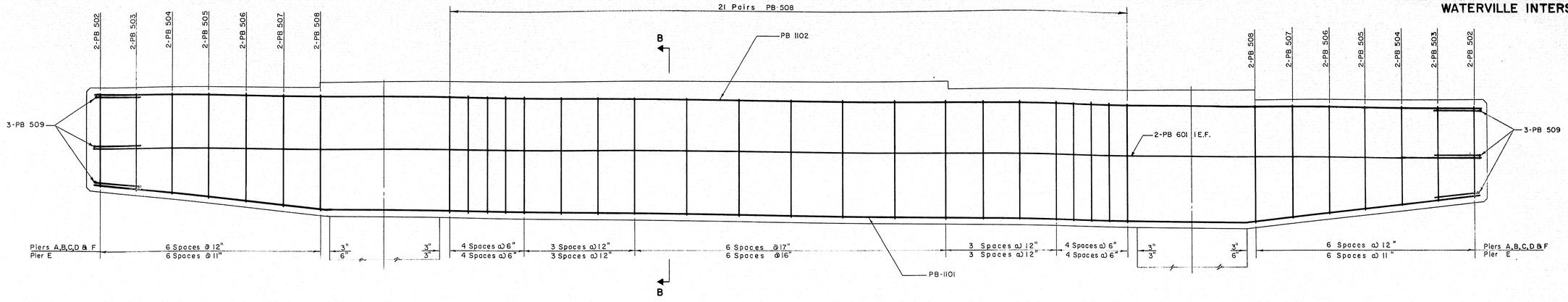
SHEET 2 OF 6 SHEETS AUGUSTA, MAINE

75-121

K+E PHOENIX BLUE 188 TRACING CLOTH D. L. M. INC. 64910

B. P. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	21	24

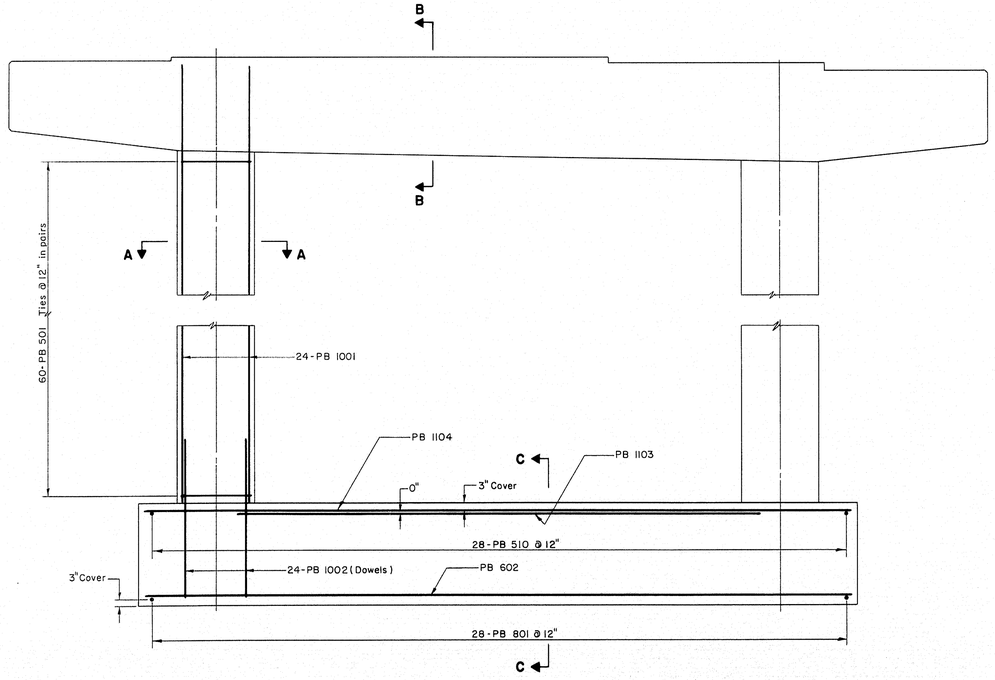
WATERVILLE INTERSTATE



PIER B CAP ELEVATION

Scale: 3/4" = 1'-0"

Note: Reinforcing in Pier Caps A, C, D, E & F similar except to be prefixed PA, PC, PD, PE, & PF respectively.

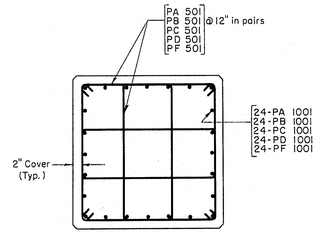


PIER B ELEVATION

Scale: 3/8" = 1'-0"

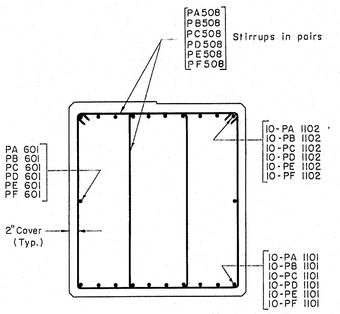
ESTIMATED QUANTITIES

PIER B . . . . . 19,668 LBS.



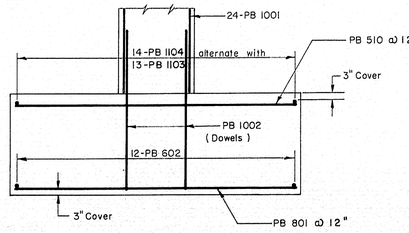
SECTION A-A

Scale: 3/4" = 1'-0"



SECTION B-B

Scale: 3/4" = 1'-0"



SECTION C-C

Scale: 3/8" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN G.B.	CHECK H.L.	BRIDGE NO.
DRAWN E.K.	APPROVED W.A.H-C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

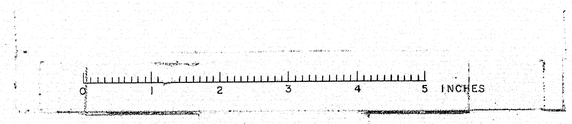
INTERSTATE #95
OVER
MAINE CENTRAL R.R. & COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

PIER B REINFORCEMENT

SHEET 3 OF 6 SHEETS AUGUSTA, MAINE

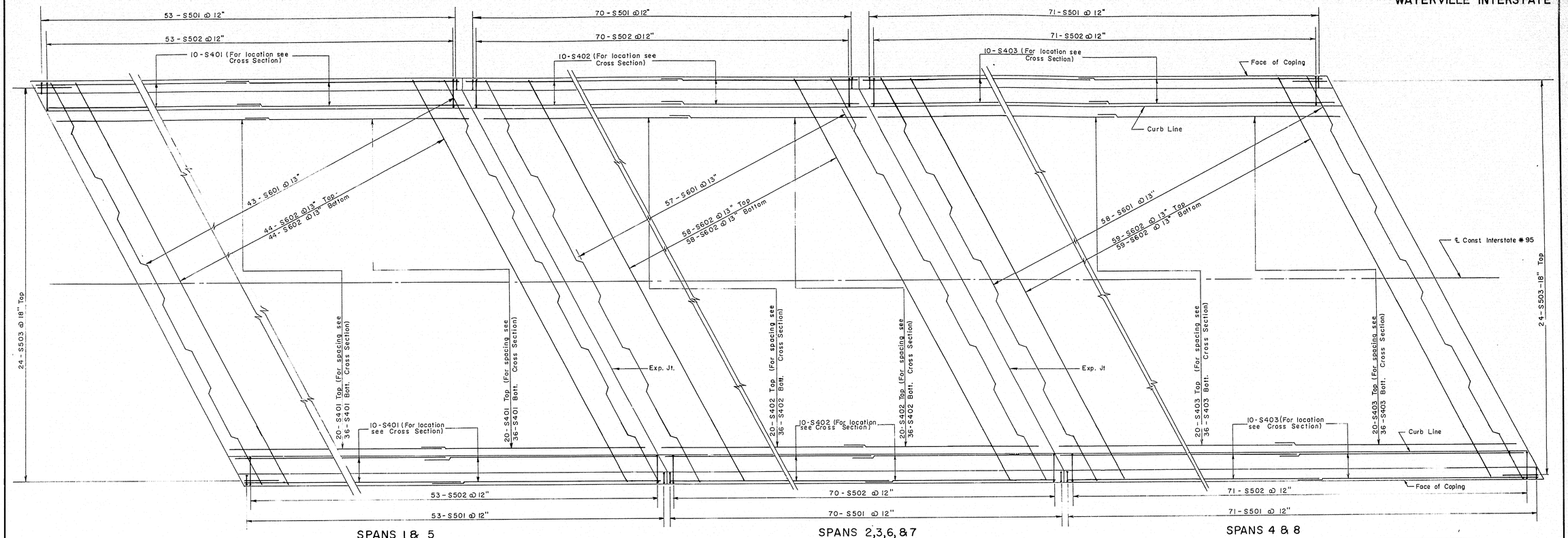
75-122

K&E PHOENIX BLUE 105 D. L. M. INC. 68815



B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	22	24

WATERVILLE INTERSTATE



SPANS 1 & 5

SPANS 2,3,6, & 7

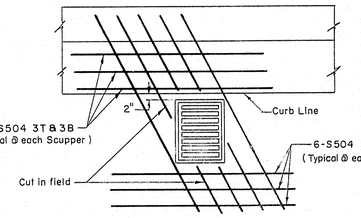
SPANS 4 & 8

DECK SLAB REINFORCEMENT

Scale 1/4" = 1'-0"

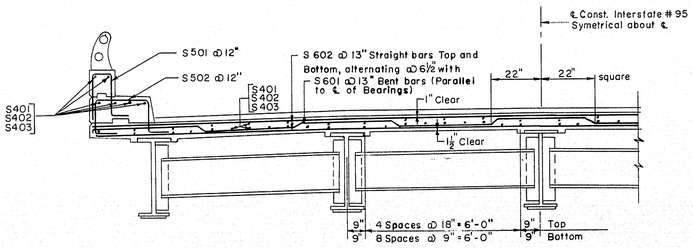
ESTIMATED QUANTITIES

DECK SLABS	117,701 LBS.
APPROACH SLABS	17,151 LBS.



SCUPPER REINFORCEMENT

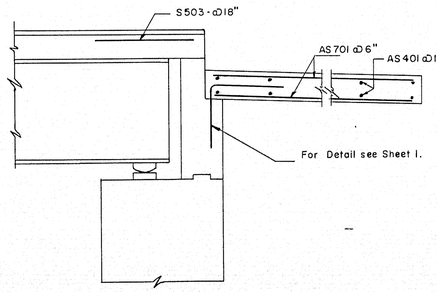
Scale: 1/2" = 1'-0"



TYPICAL CROSS SECTION

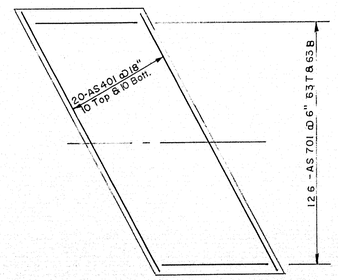
Scale 3/8" = 1'-0"

Note:
All longitudinal Reinforcing to be # 4 Bars spaced as shown (Parallel to ℄ Construction)



TYPICAL CROSS SECTION (APPROACH SLAB)

Scale 1/2" = 1'-0"



APPROACH SLAB REINFORCEMENT

Scale 1/8" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN G.B. - H.L.	CHECK G.B. - H.L.	BRIDGE NO.
DRAWN F.E.T.	APPROVED W.A.H. - C.J.M.	SURVEY PLOT

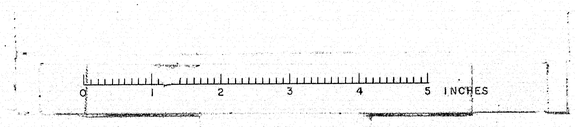
STATE HIGHWAY COMMISSION

INTERSTATE # 95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
DECK REINFORCEMENT

SHEET 4 OF 6 SHEETS — AUGUSTA, MAINE

75-123

K&E PEERLESS BLUE 105 @ TRACING CLOTH D, L, M, INC. 46815



Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
				EASTERLY ABUTMENTS													
1	22	4	16'-0"	AE 401	Str.												
2	22	4	24'-5"	AE 402	↑												
3	58	4	3'-2"	AE 403													
4	22	4	4'-0"	AE 404													
5	168	5	5'-8"	AE 501													
6	4	↓	2'-11"	AE 502													
7	↑		3'-2"	AE 503													
8			3'-5"	AE 504													
9			3'-8"	AE 505													
10	↓		3'-10"	AE 506													
11	4		4'-0"	AE 507													
12	2		4'-2"	AE 508													
13	4		4'-4"	AE 509													
14	4		4'-7"	AE 510													
15	2		4'-10"	AE 511													
16	4		5'-0"	AE 512													
17	4		5'-3"	AE 513													
18	4		5'-6"	AE 514	↓												
19	34		16'-0"	AE 515	Str.												
20	4		16'-2"	AE 516	19		3'-0"	13'-2"					0'-5"		3'-0"		16'-2"
21	4		16'-4"	AE 517	19		3'-0"	13'-4"					0'-7"		3'-0"		16'-4"
22	34		14'-6"	AE 518	Str.												
23	4		14'-6"	AE 519	19		3'-0"	11'-6"					0'-5"		3'-0"		14'-6"
24	4		14'-8"	AE 520	19		3'-0"	11'-8"					0'-7"		3'-0"		14'-8"
25	40		21'-4"	AE 521	Str.												
26	82		8'-5"	AE 522	20		2'-0"	6'-5"									
27	82		8'-11"	AE 523	S10		6'-0"	0'-5"	2'-6"								
28	82		5'-7"	AE 524	20		0'-11"	4'-8"									
29	4		12'-7"	AE 525	19		1'-3"	11'-4"					0'-6"		1'-3"		12'-7"
30	4		13'-4"	AE 526	19		2'-0"	11'-4"					0'-7"		2'-0"		13'-4"
31	8	↓	10'-6"	AE 527	Str.												
32	8	5	13'-6"	AE 528	Str.												
33	40	6	9'-6"	AE 601	Str.												
34	4	↑	7'-2"	AE 602	20		1'-11"	5'-3"									
35	↑		7'-5"	AE 603	↑		2'-2"	↑									
36			7'-8"	AE 604			2'-5"										
37			7'-11"	AE 605			2'-8"										
38	↓		8'-1"	AE 606			2'-10"										
39	4		8'-3"	AE 607			3'-0"										
40	2		8'-5"	AE 608			3'-2"										
41	4		8'-7"	AE 609			3'-4"										
42	↑		8'-10"	AE 610			3'-7"										
43			9'-1"	AE 611			3'-10"										
44			9'-3"	AE 612			4'-0"										
45	↓		9'-6"	AE 613			4'-3"										
46	4		9'-9"	AE 614	↓		4'-6"	↓									
47	2		9'-11"	AE 615	20		4'-8"	5'-3"									
48	4		6'-10"	AE 616	Str.												
49	↑		7'-0"	AE 617	↑												
50			7'-4"	AE 618													
51			7'-8"	AE 619													
52			8'-0"	AE 620													
53			8'-4"	AE 621													
54			8'-8"	AE 622													
55			9'-2"	AE 623													
56			9'-6"	AE 624													
57	↓		9'-11"	AE 625													
58	4		10'-3"	AE 626													
59	10		10'-7"	AE 627													
60	10		10'-4"	AE 628													
61	4		10'-0"	AE 629													
62	↑		9'-8"	AE 630													
63			9'-3"	AE 631													
64			8'-9"	AE 632													
65			8'-5"	AE 633													
66			8'-1"	AE 634													
67			7'-9"	AE 635													
68			7'-5"	AE 636													
69			7'-1"	AE 637													
70	↓		6'-7"	AE 638	↓												
71	4	↓	6'-3"	AE 639	Str.												
72	54	6	4'-0"	AE 640	17		1'-10"	2'-2"									
73																	
74																	
75																	
76																	
77																	
78																	
79																	
80																	
81																	

Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
82				WESTERLY ABUTMENTS													
83	22	4	16'-0"	AW 401	Str.												
84	22	4	24'-5"	AW 402	↑												
85	58	4	3'-2"	AW 403													
86	22	4	4'-0"	AW 404													
87	168	5	5'-8"	AW 501													
88	4	↓	2'-11"	AW 502													
89	4		3'-1"	AW 503													
90	2		3'-3"	AW 504													
91	4		3'-5"	AW 505													
92	↑		3'-7"	AW 506													
93			3'-10"	AW 507													
94	↓		4'-0"	AW 508													
95	4		4'-2"	AW 509													
96	2		4'-4"	AW 510													
97	4		4'-6"	AW 511													
98	↑		4'-9"	AW 512													
99			4'-11"	AW 513													
100			5'-2"	AW 514													
101	↓		5'-3"	AW 515													
102	4		5'-6"	AW 516	↓												
103	30		15'-4"	AW 517	Str.												
104	4		15'-5"	AW 518	19		3'-0"	12'-5"					0'-6"		3'-0"		15'-5"
105	4		15'-8"	AW 519	19		3'-0"	12'-8"					0'-8"		3'-0"		15'-8"
106	30		18'-1"	AW 520	Str.												
107	4		18'-2"	AW 521	19		3'-0"	15'-2"					0'-6"		3'-0"		18'-2"
108	4		18'-5"	AW 522	19		3'-0"	15'-5"					0'-8"		3'-0"		18'-5"
109	82		8'-5"	AW 523	20		2'-0"	6'-5"									
110	82		5'-9"	AW 524	20		0'-11"	4'-10"									
111	82		8'-11"	AW 525	S10		6'-0"	0'-5"	2'-6"								
112	2		14'-0"	AW 526	19		1'-5"	12'-7"					0'-8"		1'-5"		14'-0"
113	2		14'-8"	AW 527	19		2'-1"	12'-7"					0'-9"		2'-1"		14'-8"
114	2		14'-9"	AW 528	19		1'-5"	13'-4"					0'-8"		1'-5"		14'-9"
115	2		15'-5"	AW 529	19		2'-1"	13'-4"					0'-9"		2'-1"		15'-5"
116	4		8'-6"	AW 530	Str.												
117	4		11'-0"	AW 531	↑												
118	4		13'-9"	AW 532													
119	40		21'-4"	AW 533													
120	4		12'-0"	AW 534													
121	4	↓	16'-7"	AW 535													
122	4	5	14'-2"	AW 536	↓												
123	40	6	9'-6"	AW 601	Str.												
124	4	↓	7'-2"	AW 602	20		1'-11"	5'-3"									
125	4	↑	7'-4"	AW 603	↑		2'-1"	↑									
126	2		7'-6"	AW 604			2'-3"										
127	4		7'-8"	AW 605			2'-5"										
128	↑		7'-10"	AW 606			2'-7"										
129			8'-1"	AW 607			2'-10"										
130	↓		8'-3"	AW 608			3'-0"										
131	4		8'-5"	AW 609			3'-2"										
132	2		8'-7"	AW 610			3'-4"										
133	4		8'-9"	AW 611			3'-6"										
134	↑		9'-0"	AW 612			3'-9"										
135			9'-2"	AW 613			3'-11"										
136			9'-4"	AW 614			4'-1"										
137	↓		9'-6"	AW 615			4'-3"										
138	4		9'-9"	AW 616	↓		4'-6"	↓									
139	2		9'-11"	AW 617	20		4'-8"	5'-3"									
140	10		10'-10"	AW 618	Str.												
140	4		10'-5"	AW 619	↑												
141	↑		9'-11"	AW 620													
142			9'-8"	AW 621													
143			9'-4"	AW 622													
144			9'-0"	AW 623													
145			8'-7"	AW 624													
146			8'-2"	AW 625													
147			7'-9"	AW 626													
148			7'-4"	AW 627													
149			6'-11"	AW 628													
150	↓		6'-6"	AW 629													
151	4		6'-1"	AW 630													
152	8		5'-9"	AW 631													
153	4		6'-0"	AW 632													
154	↑		6'-4"	AW 633													
155			6'-8"	AW 634													
156			7'-1"	AW 635													
157			7'-5"	AW 636													
158			7'-10"	AW 637													
159			8'-3"	AW 638													
160			8'-8"	AW 639													
161	↓	↓	9'-11"	AW 640	↓												
162	4	6	9'-2"	AW 641	Str.												

Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
163	4	6	9'-6"	AW 642	Str.												
164	10	6	10'-0"	AW 643	Str.												
165	54	6	4'-0"	AW 644	17		1'-10"	2'-2"									
166																	
167																	
168																	
169																	
170																	
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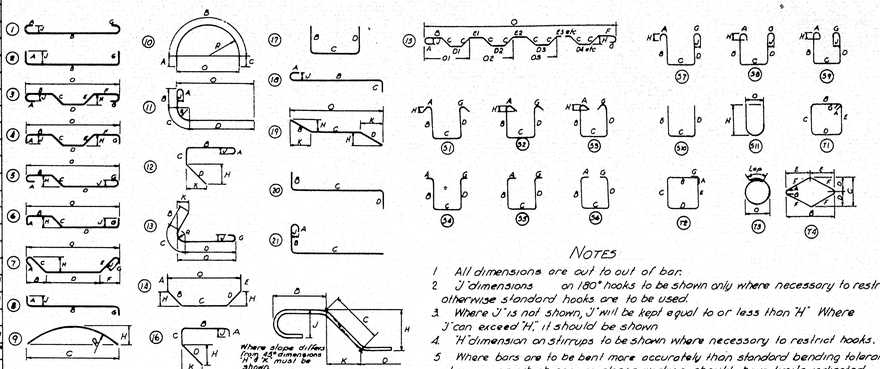
188																	
189																	
190																	

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
MAINE	I-95-6(23)	23	24

WATERVILLE INTERSTATE

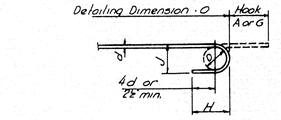
TYPICAL BAR BENDS



ENLARGED VIEW SHOWING BAR BENDING DETAILS

NOTES

1. All dimensions are out to out of bar.
2. 'J' dimensions on 180° hooks to be shown only where necessary to restrict hook size, otherwise standard hooks are to be used.
3. Where 'J' is not shown, 'J' will be kept equal to or less than 'H'. Where 'J' can exceed 'H', it should be shown.
4. 'H' dimension on stirrups to be shown where necessary to restrict hooks.
5. Where bars are to be bent more accurately than standard bending tolerances, bending dimensions which require closer working should have limits indicated.
6. Figures in circles show types.
7. No allowance for bend curvature is to be made except for standard hook & radii in excess of same.



STANDARD HOOK DETAIL

BAR SIZES

Equivalent Size	Present (Numbers)
¼"ø	#2
⅜"ø	#3
½"ø	#4
⅝"ø	#5
¾"ø	#6
⅞"ø	#7
1"ø	#8
1⅛"ø	#9
1¼"ø	#10
1⅜"ø	#11

8. Bar reinforcement metal shall conform to the requirements of the Standard Specifications for new Billet-Steel Concrete Reinforcement Bars (Intermediate Grade) Serial Designation A.A.S.H.O. M31-48 or its latest revision. All bars shall be deformed to conform with A.S.T.M. Specifications A 305-49.

THE CLARKESON ENGINEERING CO. INC.

DESIGN H. L.	CHECK G.B.	BRIDGE NO.
DRAWN J.S.	APPROVED W.A.H. - C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

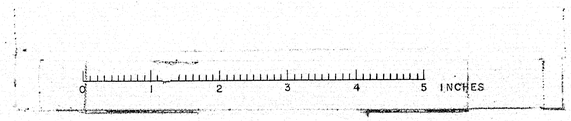
INTERSTATE #95
OVER
MAINE CENTRAL R.R. & COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

REINFORCING SCHEDULE

SHEET 5 OF 6 SHEETS — AUGUSTA, MAINE

75-124

PRINTED BY SPAULDING MOSS CO. BOSTON, MASS. 16 ORDER NO. G-1301



B.P.R. REG.NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	24	24

WATERVILLE INTERSTATE

Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
				PIER A													
1	100	5	9'-10"	PA 501	TI	0'-5"	1'-10"	2'-8"	1'-10"	2'-8"		0'-5"					
2	4	↑	10'-2"	PA 502	↑	↑	2'-3"	2'-5"	2'-3"	2'-5"		↑					
3	↑	↑	10'-4"	PA 503	↑	↑	↑	2'-6"	↑	2'-6"		↑					
4	↑	↑	10'-8"	PA 504	↑	↑	↑	2'-8"	↑	2'-8"		↑					
5	↑	↑	10'-10"	PA 505	↑	↑	↑	2'-9"	↑	2'-9"		↑					
6	↓	↑	11'-2"	PA 506	↑	↑	↑	2'-11"	↑	2'-11"		↑					
7	4	↑	11'-4"	PA 507	↑	↑	↑	3'-0"	↑	3'-0"		↑					
8	46	↑	11'-8"	PA 508	TI	0'-5"	2'-3"	3'-2"	2'-3"	3'-2"		0'-5"					
9	6	↑	5'-6¾"	PA 509	S10		1'-3"	3'-0¾"	1'-3"								
10	20	↑	6'-6"	PA 510	Str.	↑	↑	↑	↑	↑		↑					
11	14	5	9'-6"	PA 511	↑	↑	↑	↑	↑	↑		↑					
12	2	6	37'-11"	PA 601	↑	↑	↑	↑	↑	↑		↑					
13	40	6	61'-6"	PA 602	↑	↑	↑	↑	↑	↑		↑					
14	28	9	91'-6"	PA 901	↑	↑	↑	↑	↑	↑		↑					
15	48	10	27'-0"	PA 1001	↑	↑	↑	↑	↑	↑		↑					
16	48	10	65'-0"	PA 1002	Str.	↑	↑	↑	↑	↑		↑					
17	10	11	37'-11"	PA 1101	14		6'-5½"	25'-0"	6'-5½"				0'-9"				37'-10"
18	10	11	37'-11"	PA 1102	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
19																	
20																	
21																	
22																	
23				PIER B													
24	120	5	9'-10"	PB 501	TI	0'-5"	1'-10"	2'-8"	1'-10"	2'-8"		0'-5"					
25	4	↑	10'-2"	PB 502	↑	↑	2'-3"	2'-5"	2'-3"	2'-5"		↑					
26	↑	↑	10'-4"	PB 503	↑	↑	↑	2'-6"	↑	2'-6"		↑					
27	↑	↑	10'-8"	PB 504	↑	↑	↑	2'-8"	↑	2'-8"		↑					
28	↑	↑	10'-10"	PB 505	↑	↑	↑	2'-9"	↑	2'-9"		↑					
29	↓	↑	11'-2"	PB 506	↑	↑	↑	2'-11"	↑	2'-11"		↑					
30	4	↑	11'-4"	PB 507	↑	↑	↑	3'-0"	↑	3'-0"		↑					
31	46	↑	11'-8"	PB 508	TI	0'-5"	2'-3"	3'-2"	2'-3"	3'-2"		0'-5"					
32	6	↑	5'-6¾"	PB 509	S10		1'-3"	3'-0¾"	1'-3"								
33	28	5	11'-0"	PB 510	Str.	↑	↑	↑	↑	↑		↑					
34	2	6	37'-11"	PB 601	↑	↑	↑	↑	↑	↑		↑					
35	12	6	27'-6"	PB 602	↑	↑	↑	↑	↑	↑		↑					
36	28	8	11'-0"	PB 801	↑	↑	↑	↑	↑	↑		↑					
37	48	10	33'-11"	PB 1001	↑	↑	↑	↑	↑	↑		↑					
38	48	10	61'-1"	PB 1002	Str.	↑	↑	↑	↑	↑		↑					
39	10	11	37'-11"	PB 1101	14		6'-5½"	25'-0"	6'-5½"				0'-9"				37'-10"
40	10	11	37'-11"	PB 1102	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
41	13	11	20'-6"	PB 1103	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
42	14	11	27'-3"	PB 1104	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
43																	
44																	
45																	
46																	
47				PIER C													
48	112	5	9'-10"	PC 501	TI	0'-5"	1'-10"	2'-8"	1'-10"	2'-8"		0'-5"					
49	4	↑	10'-2"	PC 502	↑	↑	2'-3"	2'-5"	2'-3"	2'-5"		↑					
50	↑	↑	10'-4"	PC 503	↑	↑	↑	2'-6"	↑	2'-6"		↑					
51	↑	↑	10'-8"	PC 504	↑	↑	↑	2'-8"	↑	2'-8"		↑					
52	↑	↑	10'-10"	PC 505	↑	↑	↑	2'-9"	↑	2'-9"		↑					
53	↓	↑	11'-2"	PC 506	↑	↑	↑	2'-11"	↑	2'-11"		↑					
54	4	↑	11'-4"	PC 507	↑	↑	↑	3'-0"	↑	3'-0"		↑					
55	46	↑	11'-8"	PC 508	TI	0'-5"	2'-3"	3'-2"	2'-3"	3'-2"		0'-5"					
56	6	↑	5'-6¾"	PC 509	S10		1'-3"	3'-0¾"	1'-3"								
57	28	5	11'-0"	PC 510	Str.	↑	↑	↑	↑	↑		↑					
58	2	6	37'-11"	PC 601	↑	↑	↑	↑	↑	↑		↑					
59	28	9	11'-0"	PC 901	↑	↑	↑	↑	↑	↑		↑					
60	14	9	27'-6"	PC 902	↑	↑	↑	↑	↑	↑		↑					
61	48	10	30'-8"	PC 1001	↑	↑	↑	↑	↑	↑		↑					
62	48	10	61'-1"	PC 1002	Str.	↑	↑	↑	↑	↑		↑					
63	10	11	37'-11"	PC 1101	14		6'-5½"	25'-0"	6'-5½"				0'-9"				37'-10"
64	10	11	37'-11"	PC 1102	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
65	24	11	27'-6"	PC 1103	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
66																	
67																	
68																	
69																	
70				PIER D													
71	120	5	9'-10"	PD 501	TI	0'-5"	1'-10"	2'-8"	1'-10"	2'-8"		0'-5"					
72	4	↑	10'-2"	PD 502	↑	↑	2'-3"	2'-5"	2'-3"	2'-5"		↑					
73	↑	↑	10'-4"	PD 503	↑	↑	↑	2'-6"	↑	2'-6"		↑					
74	↑	↑	10'-8"	PD 504	↑	↑	↑	2'-8"	↑	2'-8"		↑					
75	↑	↑	10'-10"	PD 505	↑	↑	↑	2'-9"	↑	2'-9"		↑					
76	↓	↑	11'-2"	PD 506	↑	↑	↑	2'-11"	↑	2'-11"		↑					
77	4	↑	11'-4"	PD 507	↑	↑	↑	3'-0"	↑	3'-0"		↑					
78	46	↑	11'-8"	PD 508	TI	0'-5"	2'-3"	3'-2"	2'-3"	3'-2"		0'-5"					
79	6	↑	5'-6¾"	PD 509	S10		1'-3"	3'-0¾"	1'-3"								
80	20	↑	6'-6"	PD 510	Str.	↑	↑	↑	↑	↑		↑					
81	14	5	9'-6"	PD 511	Str.	↑	↑	↑	↑	↑		↑					
82	2	6	37'-11"	PD 601	Str.	↑	↑	↑	↑	↑		↑					
83	40	6	61'-6"	PD 602	Str.	↑	↑	↑	↑	↑		↑					
84	28	9	91'-6"	PD 901	Str.	↑	↑	↑	↑	↑		↑					
85	48	10	32'-10"	PD 1001	Str.	↑	↑	↑	↑	↑		↑					
86	48	10	65'-0"	PD 1002	Str.	↑	↑	↑	↑	↑		↑					
87	10	11	37'-11"	PD 1101	14		6'-5½"	25'-0"	6'-5½"				0'-9"				37'-10"
88	10	11	37'-11"	PD 1102	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
89																	
90																	
91																	
92																	
93				PIER E													
94	160	5	11'-10"	PE 501	TI	0'-5"	2'-4"	3'-2"	2'-4"	3'-2"		0'-5"					
95	4	↑	10'-2"	PE 502	↑	↑	2'-3"	2'-5"	2'-3"	2'-5"		↑					
96	↑	↑	10'-4"	PE 503	↑	↑	↑	2'-6"	↑	2'-6"		↑					
97	↑	↑	10'-8"	PE 504	↑	↑	↑	2'-8"	↑	2'-8"		↑					
98	↑	↑	10'-10"	PE 505	↑	↑	↑	2'-9"	↑	2'-9"		↑					
99	↓	↑	11'-2"	PE 506	↑	↑	↑	2'-11"	↑	2'-11"		↑					
100	4	↑	11'-4"	PE 507	↑	↑	↑	3'-0"	↑	3'-0"		↑					
101	46	↑	11'-8"	PE 508	TI	0'-5"	2'-3"	3'-2"	2'-3"	3'-2"		0'-5"					
102	6	↑	5'-6¾"	PE 509	S10		1'-3"	3'-0¾"	1'-3"								
103	16	↓	10'-7"	PE 510	Str.	↑	↑	↑	↑	↑		↑					
104	22	5	7'-6"	PE 511	↑	↑	↑	↑	↑	↑		↑					
105	2	6	37'-11"	PE 601	↑	↑	↑	↑	↑	↑		↑					
106	40	6	71'-6"	PE 602	↑	↑	↑	↑	↑	↑		↑					
107	32	9	101'-6"	PE 901	Str.	↑	↑	↑	↑	↑		↑					
108	10	11	37'-11"	PE 1101	14		6'-5½"	25'-0"	6'-5½"				0'-9"				37'-10"
109	10	11	37'-11"	PE 1102	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
110	56	11	43'-0"	PE 1103	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
111	56	11	61'-3"	PE 1104	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
112																	
113																	
114																	
115																	
116																	
117				PIER F													
118	108	5	9'-10"	PF 501	TI	0'-5"	1'-10"	2'-8"	1'-10"	2'-8"		0'-5"					
119	4	↑	10'-2"	PF 502	↑	↑	2'-3"	2'-5"	2'-3"	2'-5"		↑					
120	↑	↑	10'-4"	PF 503	↑	↑	↑	2'-6"	↑	2'-6"		↑					
121	↑	↑	10'-8"	PF 504	↑	↑	↑	2'-8"	↑	2'-8"		↑					
122	↑	↑	10'-10"	PF 505	↑	↑	↑	2'-9"	↑	2'-9"		↑					
123	↑	↑	11'-2"	PF 506	↑	↑	↑	2'-11"	↑	2'-11"		↑					
124	4	↑	11'-4"	PF 507	↑	↑	↑	3'-0"	↑	3'-0"		↑					
125	46	↑	11'-8"	PF 508	TI	0'-5"	2'-3"	3'-2"	2'-3"	3'-2"		0'-5"					
126	6	↑	5'-6¾"	PF 509	S10		1'-3"	3'-0¾"	1'-3"								
127	28	5	11'-0"	PF 510	Str.	↑	↑	↑	↑	↑		↑					
128	2	6	37'-11"	PF 601	↑	↑	↑	↑	↑	↑		↑					
129	28	9	11'-0"	PF 901	↑	↑	↑	↑	↑	↑		↑					
130	14	9	27'-6"	PF 902	↑	↑	↑	↑	↑	↑		↑					
131	48	10	30'-11"	PF 1001	↑	↑	↑	↑	↑	↑		↑					
132	48	10	61'-1"	PF 1002	Str.	↑	↑	↑	↑	↑		↑					
133	10	11	37'-11"	PF 1101	14		6'-5½"	25'-0"	6'-5½"				0'-9"				37'-10"
134	10	11	37'-11"	PF 1102	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
135	23	11	27'-3"	PF 1103	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
136																	
137																	
138																	
139																	
140				DECK													
141	304	4	27'-1"	S 401	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
142	608	4	35'-6"	S 402	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
143	304	4	36'-3"	S 403	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
144	1056	5	41'-1"	S 501	S5		1'-4"	0'-8"	1'-4"			0'-9"					
145	1056	5	61'-1"	S 502	S5	0'-9"	1'-3"	2'-1"	1'-3"			0'-9"					
146	96	5	31'-0"	S 503	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
147	430	6	41'-3"	S 601	15		4'-4"	0'-8½"	4'-3½"	3'-3"	4'-4"		0'-5½"				39'-2"
148	876	6	39'-2"	S 602	Str.	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
149	120	5	6'-0"	S 504	Str	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
150																	
151																	
152																	
153																	
154																	
155				APPROACH SLABS													
156	88	4	34'-8"	AS 401	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
157	504	7	141'-8"	AS 701	Str.	↑	↑	↑	↑	↑		↑	↑	↑	↑	↑	↑
158																	
159																	
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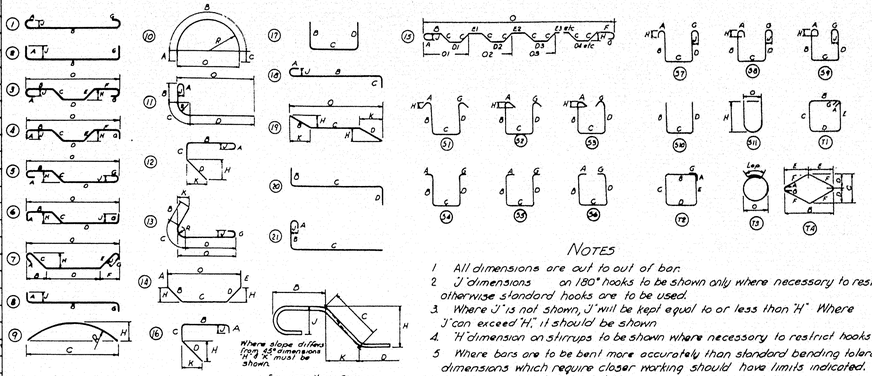
TYPICAL BAR BENDS

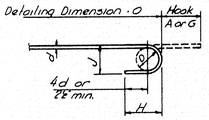


ENLARGED VIEW SHOWING BAR BENDING DETAILS

Where slope differs from 45°, dimensions "H" & "K" must be shown.

NOTES

1. All dimensions are out to out of bar.
2. 'J' dimensions on 180° hooks to be shown only where necessary to restrict hook size, otherwise standard hooks are to be used.
3. Where 'J' is not shown, 'J' will be kept equal to or less than 'H'. Where 'J' can exceed 'H', it should be shown.
4. 'H' dimension on stirrups to be shown where necessary to restrict hooks.
5. Where bars are to be bent more accurately than standard bending tolerances, bending dimensions which require closer marking should have limits indicated.
6. Figures in circles show types.
7. No allowance for bend curvature is to be made except for standard hook & radii in excess of same.



STANDARD HOOK DETAIL

BAR SIZES

Equivalent Size	Present (Numbers)
1/4" ϕ	#2
3/8" ϕ	#3
1/2" ϕ	#4
5/8" ϕ	#5
3/4" ϕ	#6
7/8" ϕ	#7
1" ϕ	#8
1" □	#9
1 1/8" □	#10
1 1/4" □	#11

8. Bar reinforcement metal shall conform to the requirements of the Standard Specifications for new Billet-Steel Concrete Reinforcement Bars (Intermediate Grade) Serial Designation AASHO M31-48 or its latest revision. All bars shall be deformed to conform with A.S.T.M. Specifications A 305-49.

THE CLARKESON ENGINEERING CO. INC.

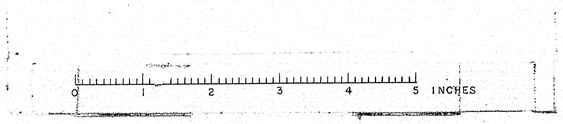
DESIGN H.L.	CHECK G.B.	BRIDGE NO.
DRAWN J.S.	APPROVED W.A.H.-C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
REINFORCING SCHEDULE

SHEET 6 OF 6 SHEETS AUGUSTA, MAINE

75-125

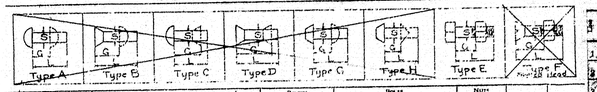


2310-10m-12.53-BSCo

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION

BETH DRAFTING ROOM BETH WORKS

SUMMARY OF FIELD RIVETS AND BOLTS



Line	Number of rivets or bolts	(Net)	Connecting	Rivets Diam. S	Rivets Type	Rivets Grip	Rivets Length	Bolts Type	Bolts Head Hex-Sq	Bolts Grip S	Bolts Length L	Bolts Length Nut Incl.	Nuts No.	Nuts Hex. or Sq.	Item	Weight
1	775		TOP DIAPHS. TO STRING.	3/4				E	SQ		2	STD	775	SQ	801-4829	
2			3% Excess = 5%													
3																
4			AM. STD. REG.													

Summary of Sheet Nos. 1 ..... Total Weight this Page .....

All bolts over 1 1/4" ϕ and 2'-6" in length to be billed as shop or mob. Form No. 2246.
For bolts or rivets of special design, draw sketch of this kind.

Gen'l Supt. / Shop Supt. — Layout / Fitter — Temp. Shop / Mech. Shop — Smith Shop / Rod Shop — Loader / Skipper — Scale / Bill — Purch. Dept. / Owners — Erection / S. Insp. — O. Insp. / Appl. —

In Charge of (Hoover) NATHAN B. POSS — Made by FT — Date 12/22/58 — Checked by ..... — Date .....

Bill Page No. ..... — Shop No. .....

Contract CP1434 — Page No. M 1 — Use as B.P.P.

Customer CALLAHAN BROS INC. — Structure INTERSTATE #95 WATERVILLE MAINE

16

2311-11m-3.54-BSCo

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION

BETH DRAFTING ROOM BETH WORKS

BILL OF MISCELLANEOUS MATERIAL

Line	No.	Description	Mark or Item No.	Weight	Requisition No.	Order No.
1						
2	240	7/8" x 2 1/4" HARDENED CUT STEEL WASHERS			801-4829	
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19		HARD. WASH. FOR A325 BOLTS AT EXP. DAM. CONNECTIONS				
20						
21						
22						
23						
24						
25						
26						
27						
28						

Material: .....
Specifications: ASTM A325
Machining: .....
Paint: NONE
Shipment: SHIP WITH A325 BOLTS ON SHEET** SBH1
Inspection: .....
Remarks: .....

Gen'l Supt. / Shop Supt. — Layout / Fitter — Temp. Shop / Mech. Shop — Smith Shop / Bld Shop — Loader / Skipper — Scale / Bill — Purch. Dept. / Owners — Erection / S. Insp. — O. Insp. / Appl. — Stores

In Charge of (Hoover) NATHAN B. POSS — Made by FT — Date 12/22/58 — Checked by ..... — Date .....

Bill Page No. ..... — Shop No. .....

Contract CP1434 — Bill Page No. M 3 — Use as B.P.P.

Customer CALLAHAN BROS INC. — Structure INTERSTATE #95 WATERVILLE MAINE

16

2311-11m-3.54-BSCo

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION

BETH DRAFTING ROOM BETH WORKS

BILL OF MISCELLANEOUS MATERIAL

Line	No.	Description	Mark or Item No.	Weight	Requisition No.	Order No.
1		(160 NET)				
2	165	STD WASHER 3" x 1/4 THK - 1 1/16" HOLE	WI			RES.
3						
4		(USED UNDER NUTS OF ANCH. BOLTS)				
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						

Material: ASTM A7
Specifications: MAINE STATE HIGHWAY COMMISSION
Machining: .....
Paint: ONE SHOP COAT AS PER SPECS
Shipment: SHIP WITH 1ST CARLOAD OF STEEL
Inspection: .....
Remarks: FIELD WASHERS

Gen'l Supt. / Shop Supt. — Layout / Fitter — Temp. Shop / Mech. Shop — Smith Shop / Rod Shop — Loader / Skipper — Scale / Bill — Purch. Dept. / Owners — Erection / S. Insp. — O. Insp. / Appl. — Stores

In Charge of (Hoover) NATHAN B. POSS — Made by FT — Date 12/9/58 — Checked by R — Date 12-8-58

Bill Page No. ..... — Shop No. .....

Contract CP1434 — Bill Page No. M 2 — Use as B.P.P.

Customer CALLAHAN BROS INC MECHANIC FALLS MAINE — Structure PROJ # 6(32)123 WATERVILLE MAINE

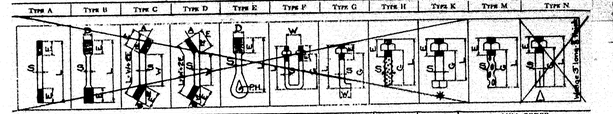
6

2208-2m-2.53-BSCo

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION

BETH DRAFTING ROOM BETH WORKS

BILL OF RODS



Line	No. of rods	Mark	Type	Spec. Item No.	Rods Length Ft.	Rods Length In.	Rods Bend. A	Rods Bend. B	Rods Detail Information Screw E	Rods Detail Information Screw D	Rods Detail Information Direct	Rods Detail Information Pin Dia. Ins. Ctrs.	Rods Detail Information Pin Dia. Ins. Ctrs.	Rods Detail Information Pin Dia. Ins. Ctrs.	Nuts No.	Nuts Sq. or Hex.	Mill Order Weight each with nuts	Mill Order No. of pcs.	Mill Order Section	Mill Order Length Ft.	Mill Order Length In.	Item
1	160	AB1	M	14	2	0	-	-	4	-	RH				160	HEX						RES.
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						
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23																						
24																						
25																						
26																						
27																						
28																						

AMER. STD. HEAVY

SPECS: ASTM A7

ADVANCE SHIPMENT

Total Weight of Material on this Page ..... Paint — NO PAINT OIL THDS

*Mill all Type K bolts 3/4" ϕ to 1 1/4" ϕ incl. up to 2'-0" incl. in length on bolt list, form 2210.

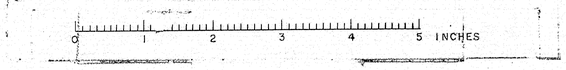
Gen'l Supt. / Shop Supt. — Layout / Fitter — Temp. Shop / Mech. Shop — Smith Shop / Rod Shop — Loader / Skipper — Scale / Bill — Purch. Dept. / Owners — Erection / S. Insp. — O. Insp. / Appl. — Stores

In Charge of (Hoover) NATHAN B. POSS — Made by TT — Date 12/4/58 — Checked by R — Date 12-8-58

Bill Page No. ..... — Shop No. .....

Contract CP1434 — Bill Page No. M 1 — Use as B.P.P.

Customer CALLAHAN BROS INC MECHANIC FALLS MAINE — Structure PROJ # 6(32)123 WATERVILLE, MAINE



2210-10m-12,53-USCo

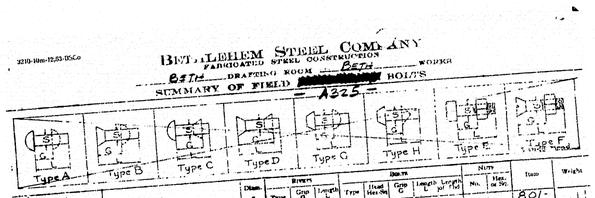
BETHLEHEM STEEL COMPANY

FABRICATED STEEL CONSTRUCTION

BSTd DRAFTING ROOM BSTd WORKS

SUMMARY OF FIELD [redacted] BOLTS

= A325 =



Mark	Number of Pieces or Bolts	NET	Connecting	Diam. B	Washers Type	Washers Grip G	Washers Length L	Bolts Type	Bolts Head Style-Dim.	Bolts Grip G	Bolts Length	Bolts Length per Foot	Nuts No.	Nuts Heavy Hex or Semi	Item	Weight
1	25	20	36WF150 & 33WF130 TO ANCH	7/8				A325	HEX	3	STD		25	HEX	801-4828	
2	105	100	36WF194 TO 5 KP BMS.	7/8				A325	HEX	4	STD		105	HEX	1	
3			10 EXCESS = 8%													
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
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19																
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21																
22																
23																
24																
25																
26																
27																
28																
29																
30																

ASTM-A325 HIGH STRENGTH BOLTS (NUTS ON BOLTS)

TOTAL WEIGHT THIS PAGE

SUMMARY OF SHEET NOS. 1

ALL BOLTS OVER 1 1/2" Ø AND 2'-0" IN LENGTH TO BE BILLED AS BOOK OR KOB FORM NO. 3208.
FOR BOLTS OR RIVETS OF SPECIAL GRADES, BILL UNDER OTH THIS HEADING

Grd'l Surf. ☐ Lettered ☐ Bmkg. Shop ☐ Stitch Shop ☐ Loads ☐ Scale ☐ Punch Dept ☐ Stairbld ☐ O. Iron ☐
Shop Surf. ☐ Fitted ☐ Mach Shop ☐ Mat'l Shop ☐ Shipped ☐ Mill ☐ Owners ☐ S. Iron ☐ Angl ☐

CONTRACT 304 1 CP4134

To Charge of (HAUVER)

Mark by FT Date 11-5-13

Checked by Date

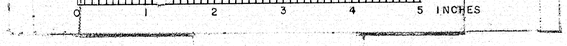
Rec'd Date

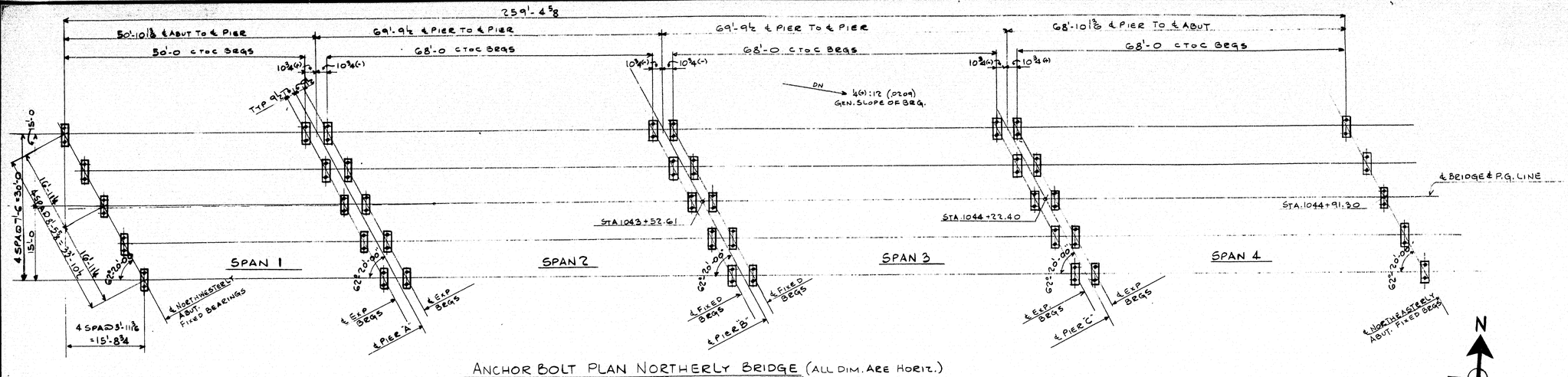
Shop no.

Use as B.F.P.

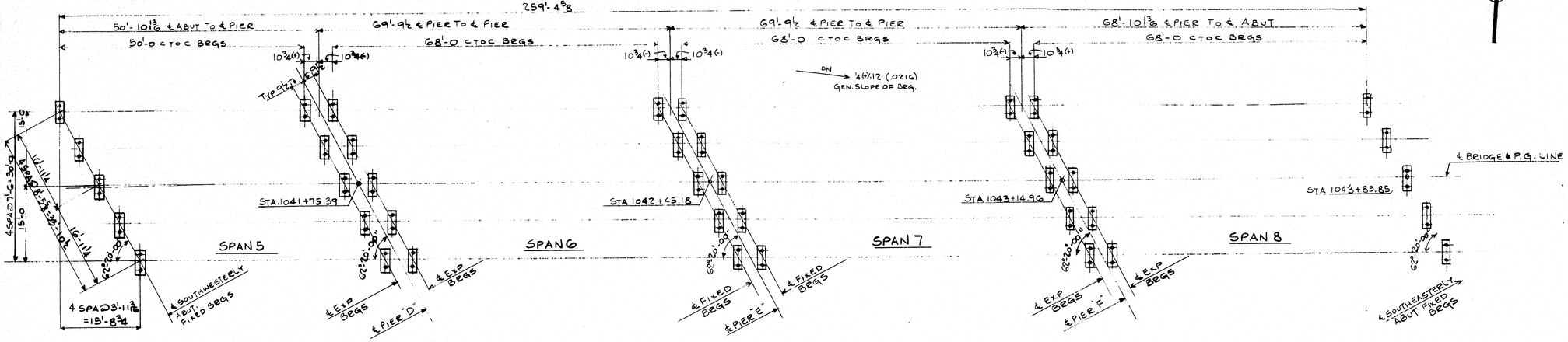
NATHANEROSS

Purchaser CALLAHAN BROS INC Structure INTERSTATE #95 WATERVLLE MAINE

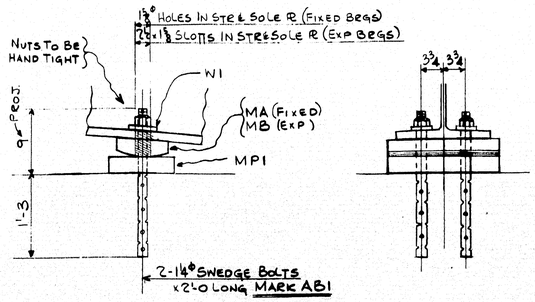




ANCHOR BOLT PLAN NORTHERLY BRIDGE (ALL DIM. ARE HORIZ.)



ANCHOR BOLT PLAN SOUTHERLY BRIDGE (ALL DIM. ARE HORIZ.)



EXP & FIXED BRG DETAIL

ERECTOR NOTE:- SOLE RS MA & MB ARE SHIPPED WITH STRINGERS

NOTES:-

1.- DIMENSIONS ON THIS PLAN MUST BE STRICTLY ADHERED TO OTHERWISE STEEL WILL NOT FIT. NOTIFY B.S CO. AT ONCE INCASE OF ERROR
2.- ANCHOR BOLTS FURNISHED BY B.S. CO. AND SET BY OTHERS
3.- BEARING PREPARATIONS BY OTHERS
4.- FOR GENERAL NOTES SEE SHEET E2.

ANCHOR BOLT PLAN

RIVETS
OPEN HOLES
REAM
MILLING
PAINT
WELDING
SHOP CONTACT SURFACES

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
Q. INSP.	
WEIGHTS	

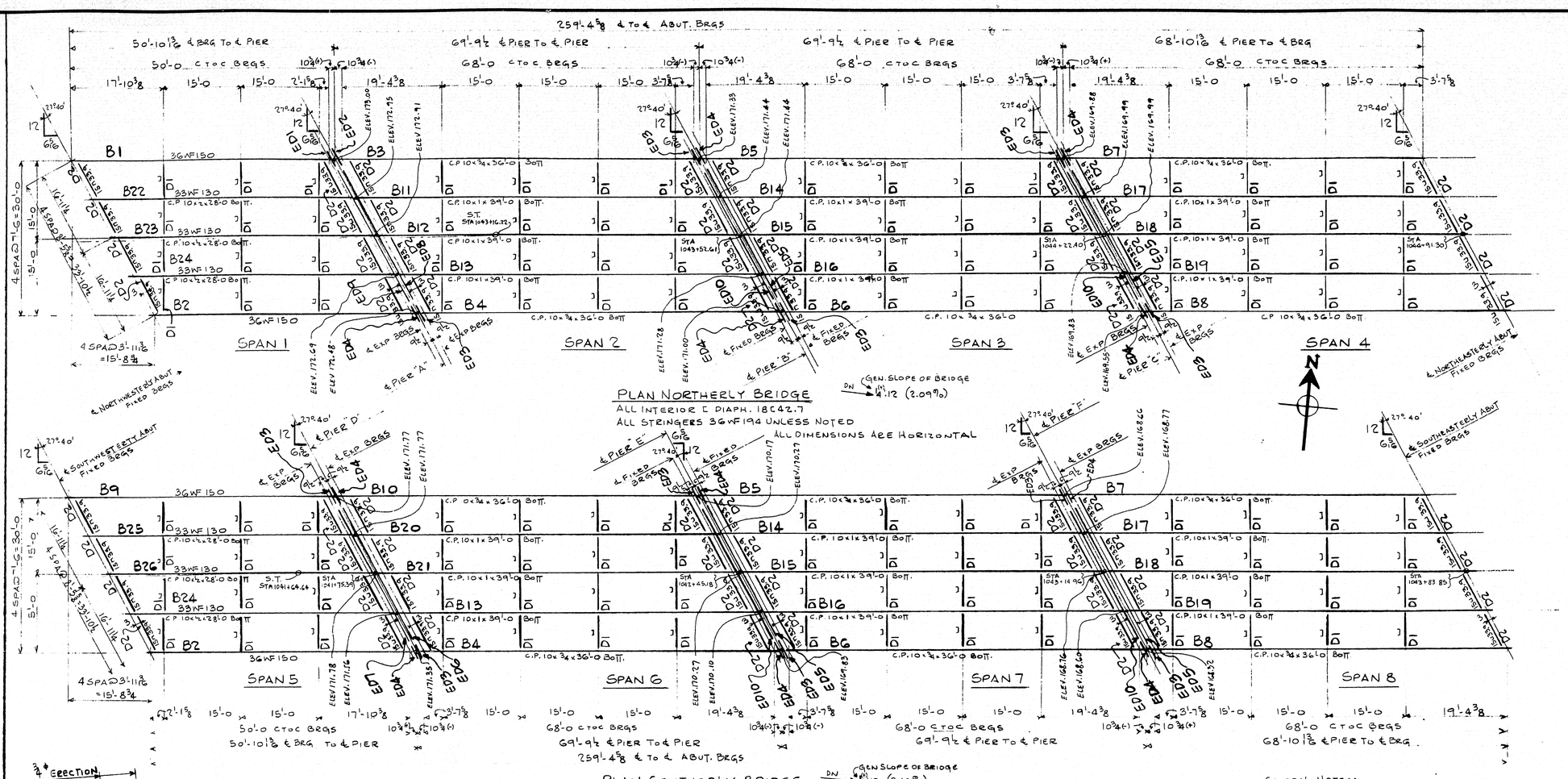
INTERSTATE #95
OVER MAINE CENTRAL R.R & COUNTY ROAD PROJ 6(25) 123
WATERVILLE, MAINE CUST: CALLAHAN BROTHS INC.

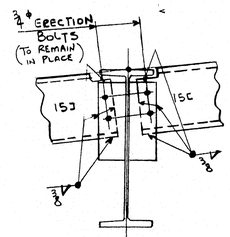
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM BETH WORKS
IN CHARGE NATWANASS (MOUSE) MADE BY JT 12/4/58
CHECKED BY R 12-12-58 TRACED BY
REVISED LAST ASSEM. MK.

SHOP NO. CONTRACT CP4434 SHEET E1

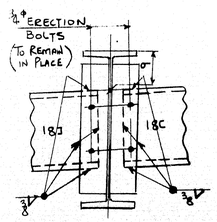
75-125A

0 1 2 3 4 5 INCHES





Typical Welding of End Diaph.



Typical Welding of Int. Diaph

Typical Expansion Dam Detail

Sect. A-A

General Notes:-

1. Erection - By others
2. Mat'l Specs: A S T M-A7 unless noted
3. Workmanship Specs: State of Maine State Highway Commission (Jan. 1956)
4. All holes, cuts, blocks etc. for other trades must be shown on this plan at time of approval, otherwise work must be done in the field at no expense to B. S. Co.
5. All welding shall conform to the current specs. For welded H'way & Railway Bridges of the American Welding Society.
6. Shop Paint:- One coat as per specs
7. Field Paint:- Furnished & applied by others
8. Field Connections to be welded or A325 bolted as shown
9. All Erection Bolts to remain in place
10. Railing, Railing Anchor Bolts, Field Weld Wire, Drift Pins, Fitting up Bolts, Bearing Preparation material, All Drainage material, Spirals, Studs, and Erection Shims are by others.

Framing Plan

Temp.	
Supt.	
Layout	
Fitter	
Shop Insp.	
Pc. Wk.	
S. Smith	
Mech.	
Ernest.	
O. Insp.	
Weights	

Rivets
Open Holes
Ream
Milling
Paint
Welding
Shop Contact Surfaces

Shop No.

Interstate #95
Over Maine Central R.R. & County Road Proj 6(23)123
Waterville, Maine

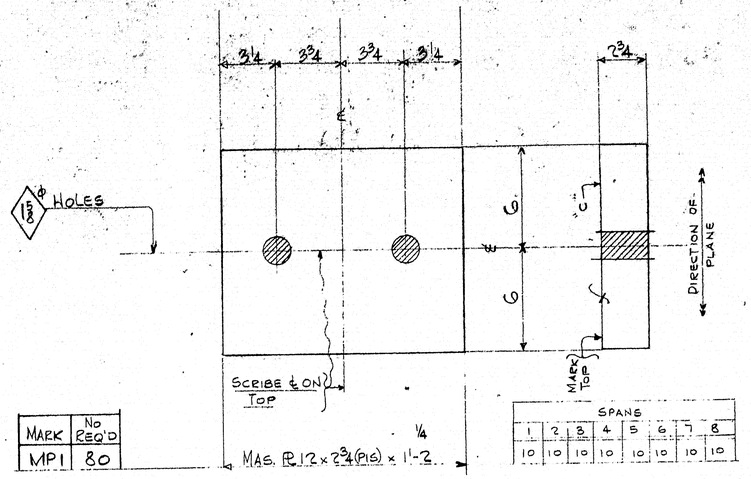
Bethlehem Steel Company
Fabricated Steel Construction

Bethlehem Drafting Room B&TM Works
In charge Nathan (Hoover) & Boss Made by JT 12/5/57
Checked by R 12-22-58 Traced by
Revised Last Assem. Mk.

Contract CP1434 Sheet E2

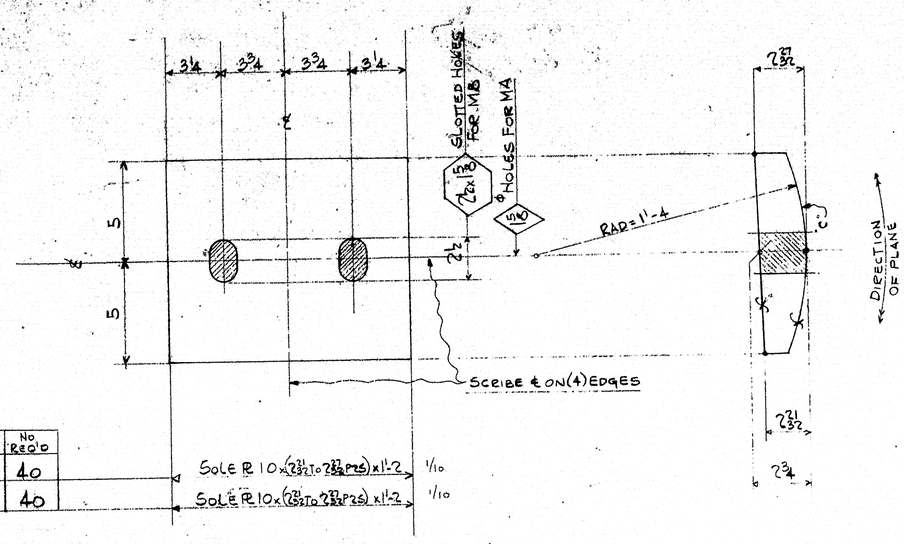
2300-800-11,56-20Co

75-125 B



MARK	No REQ'D
MP1	80

SPANS							
1	2	3	4	5	6	7	8
10	10	10	10	10	10	10	10



MARK	No REQ'D	
MA	40	SOLE PL 10 x (2 31/32 TO 2 27/32 P2S) x 1'-2 1/10
MB	40	SOLE PL 10 x (2 31/32 TO 2 27/32 P2S) x 1'-2 1/10

SHOP NOTES:-
1. PLATES TO BE PRESS STRAIGHTENED WHERE NECESSARY TO INSURE FLATNESS.
2. SURFACES MARKED "C" TO BE COATED WITH A HOT MIXTURE OF WHITE LEAD & TALLOW
3. SOLE PLATES ARE NOT TO BE PAINTED UNTIL AFTER ASSEMBLY TO STRINGERS
4. MAT'L SPECS AST M A7
5. WORKMANSHIP SPECS. MAINE STATE HIGHWAY COMMISSION

RIVETS NONE
OPEN HOLES AS NOTED
REAM NO
MILLING AS NOTED
PAINT ONE COAT AS PER SPECS EXCEPT "C" SURFACES AS NOTED
WELDING NO
SHOP CONTACT SURFACES NO

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PR. WK.
S. SMITH
MCH.
SHOT.
G. INSP.
WEIGHTS

SHOP NO.

BEARING DETAILS

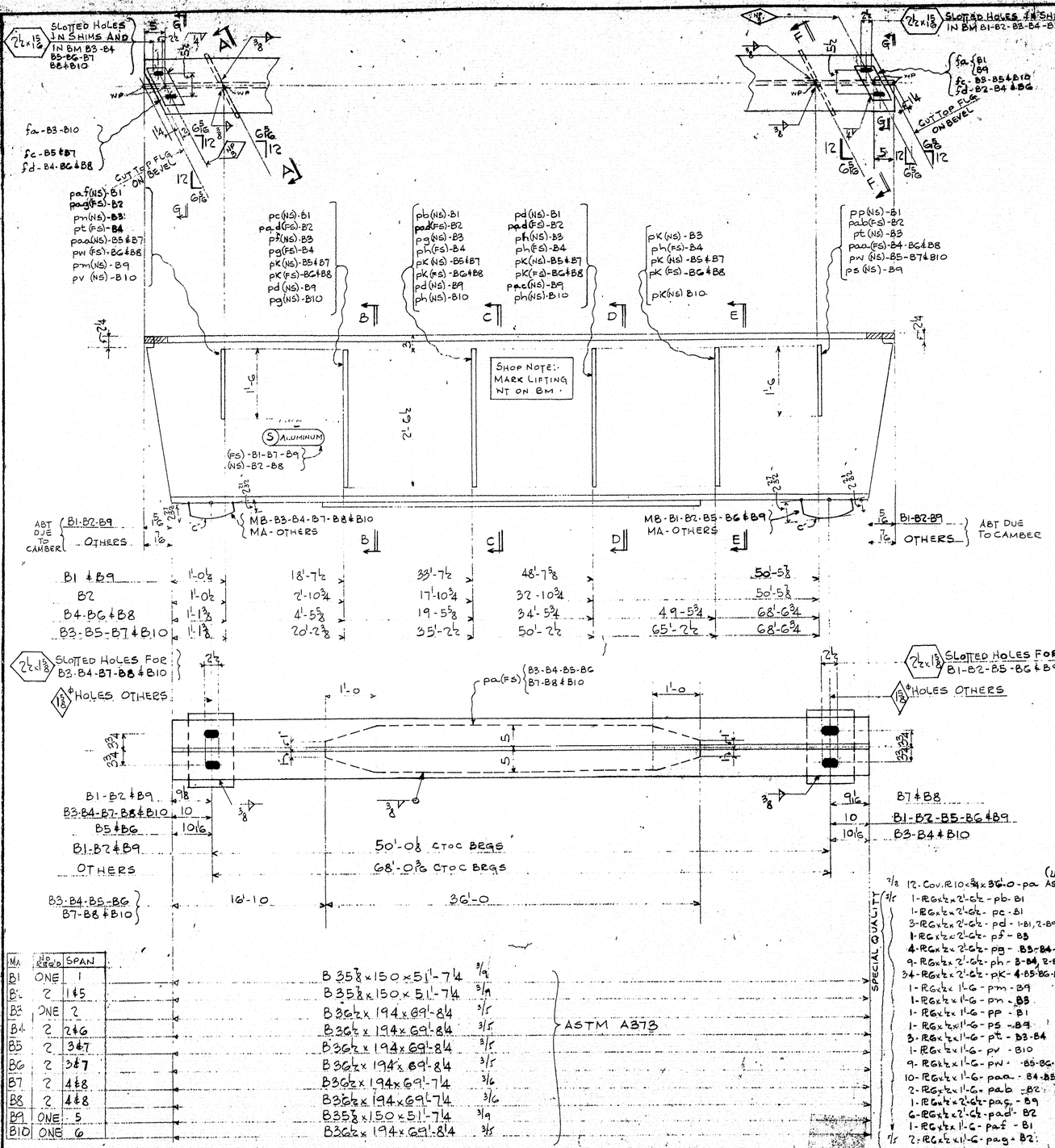
INTERSTATE #95
OVER MAINE CENTRAL R.R. & COUNTY ROAD PROJ 6(12) X1
WATERVILLE, MAINE - CUST: CALLAHAN BROTHS INC.

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM BETH. (Houses) WORKS
IN CHARGE NATHANIEL ROSS MADE BY H 12/4/56
CHECKED BY R 12-15-56 TRACED BY
REVISED LAST ASSEM. MK.

CONTRACT CP4424 SHEET 1

75-125 C

0 1 2 3 4 5 INCHES



MA	NO REQ'D	SPAN
B1	ONE	1
B2	2	1&5
B3	ONE	2
B4	2	2&6
B5	2	3&7
B6	2	3&7
B7	2	4&8
B8	2	4&8
B9	ONE	5
B10	ONE	6

B 35⅞ x 150 x 51'-7⅝ 9/16
B 35⅞ x 150 x 51'-7⅝ 9/16
B 36½ x 194 x 69'-8¼ 3/5
B 36½ x 194 x 69'-8¼ 3/5
B 36½ x 194 x 69'-8¼ 3/5
B 36½ x 194 x 69'-8¼ 3/5
B 36½ x 194 x 69'-8¼ 3/16
B 36½ x 194 x 69'-8¼ 3/16
B 35⅞ x 150 x 51'-7⅝ 9/16
B 36½ x 194 x 69'-8¼ 3/5
} ASTM A373

SPECIAL QUALITY (um) ASTM A373 (B3-B4-B5 BG-B7 B8-B10)

7/8	12-Cov.R10x3¾x36'-0-pa
9/16	1-RGx½x2'-6½-pb-B1
	1-RGx½x2'-6½-pc-B1
	3-RGx½x2'-6½-pd-1-B1,2-B9
	1-RGx½x2'-6½-pf-B3
	4-RGx½x2'-6½-pg-B3-B4-B10
	9-RGx½x2'-6½-ph-3-B4, 2-B10, 1-B3
	34-RGx½x2'-6½-pK-4-B5-BG-B7-B8, 1-B3, 1-B10
	1-RGx½x1'-6-pm-B9
	1-RGx½x1'-6-pn-B3
	1-RGx½x1'-6-pp-B1
	1-RGx½x1'-6-ps-B9
	3-RGx½x1'-6-pt-B3-B4
	1-RGx½x1'-6-pv-B10
	9-RGx½x1'-6-pw-B5-BG-B7-B8-B10
	10-RGx½x1'-6-paa-B4-B5-BG-B7-B8
	2-RGx½x1'-6-pab-B2
	1-RGx½x2'-6½-pag-B9
	6-RGx½x2'-6½-pad-B2
	1-RGx½x1'-6-paf-B1
7/16	2-RGx½x1'-6-pag-B2

SECT. G-G FOR B2-B4-BG&B8

SECT. G-G FOR B1-B3-B5-B7-B9&B10

SECT. B-B&C-C FOR B1

SECT. B-B-C-C-D-D FOR B3-B5-B7 B9&B10

SECT. D-D FOR B1

SECT. E-E FOR B3-B5-B7&B10

SECT. B-B-C-C-D-D FOR B2-B4-BG&B8

SECT. E-E FOR B4-BG&B8

SECT. A-A FOR B1&B9

SECT. A-A-F-F FOR B3 B5-B7&B10

SECT. F-F FOR B1-B9

SECT A-A-F-F FOR B2-B4-BG&B8

PAINT SKETCH

CAMBER DIAGRAM

4-FILL 8x½x3⅜x9 -fa B1-B3-B9-B10 (10/4)

8-Bev. FILL 8½x(15/16 TO 3⅜ PIS)x9-fc 2-B5,1-B7,1-B3,1-B10 (2/3)
12-Bev. FILL 8½x(15/16 TO 3⅜ PIS)x9-fd 2-B4&BG, 1-B2&B8

16-R10x(2⅜ TO 2¾ PIS)x1'-2-MA DET. ON SH#1
16-R10x(2⅜ TO 2¾ PIS)x1'-2-MB DO NOT DUPLICATE

¼ ▷ WELD x 19-0
⅜ ▷ WELD x 1340-0

RIVETS NONE
OPEN HOLES 15/16ϕ UNLESS NOTED
REAM NO
MILLING YES
PAINT ONE COAT AS PER SPECS EXCEPT C' SURFACES & AS NOTED
WELDING YES.
SHOP CONTACT SURFACES NO PAINT

SURFACES MARKED "C" TO BE COATED WITH A HOT MIXTURE OF WHITE LEAD & TALLOW

NOTES:-
1- FOR GEN. NOTES & WELDING SPECS, SEE SHT E2
2- MAT'L ASTM-A7 UNLESS NOTED

STRINGERS B1 TO B10

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PG. WK.	
B. SMITH	
MCH.	
ERECT.	
O. INSP.	
WEIGHTS	

INTERSTATE #95
OVER MAINE CENTRAL R.R. & COUNTY ROAD 6(23) 113
WATERVILLE, MAINE

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM BETH WORKS
IN CHARGE NATHAN HOOVER CROSS MADE BY JT 12/11/58
CHECKED BY E 12-18-58 TRACED BY
REVISED LAST ASSEM. MK.

CONTRACT CP4434 SHEET 2
SHOP NO.

75-125 D

2½x15/16 SLOTTED HOLES IN SHIMS & BM

fd {B11-B15-B18-B21 / B12-B20
fa - B13-B16-B19
ff & B14-B17

pm(NS) pv(FS) B11
PP(NS) pv(FS) B12
PP(NS) paa(FS) B13
pv(NS) pt(FS) B14-B17
pab(NS) pac(FS) B15-B18
ps(NS) PW(FS) B16-B19
PY(NS) pac(FS) B20
PP(NS) pac(FS) B21

CUT TOP FLG ON BEVEL

pf(NS) pb(FS) B11
pb(NS) ph(FS) B12
ph(FS) pc(NS) B13
pg(FS) pf(NS) B14-B17
pd(FS) ph(NS) B15-B18
ph(FS) pd(NS) B16-B19
pf(FS) pf(NS) B20
pb FS pb(NS) B21
ph(FS)

pf(NS) pc(FS) B11
pb(NS) ph(FS) B12
pc(NS) pg(FS) B13
pf(NS) pd(FS) B14-B17
ph(NS) ph(FS) B15-B18
pd(NS) pf(FS) B16-B19
pf(NS) pf(FS) B20
pb(NS) pc(FS) B21
ph(FS)

pf(NS) pd(FS) B11-B14-B17-B20
pb(NS) ph(FS) B12
ph(NS) pc(NS) B13
pg(FS) ph(NS) B15-B18-B21
pd(NS) pf(FS) B16-B19

pw(NS) pp(FS) B11
pac(NS) pab(FS) B12-B15-B18-B21
pt(NS) py(FS) B13-B16-B19
pw(NS) ps(FS) B14-B17-B20

SHOP NOTE: MARK LIFTING PT. ON BM.

ABT DUE TO CAMBER

MA-B14-B15-B16
MB-OTHERS

MB-B14-B15-B16
MA-OTHERS

ABT DUE TO CAMBER

B11-B14-B17-B20	1'-1 3/8	16'-3¼	31'-3¼	46'-3 3/8	61'-2 3/8	68'-6¾
B12-B15-B18-B21	1'-1 3/8	12'-4	27'-4	42'-4 3/8	57'-4 3/8	68'-6¾
B13-B16-B19	1'-1 3/8	8'-4 3/8	23'-4 3/8	38'-5	53'-5	68'-6¾

2½x15/16 SLOTTED HOLES IN B21 B11-B12-B13-B17-B18-B19-B20

1⅛ ϕ HOLES - B14-B15-B16

2½x1⅛ SLOTTED HOLES IN B14-B15-B16

1⅛ ϕ HOLES - OTHERS

pa(FS)

B14-B15-B16 OTHERS: 10½ / 10

B17-B18-B19: 9½
B11-B12-B13-B20-B21: 10½
B14-B15-B16: 10

68'-0 3/8 C TO C BRGS
15'-4
39'-0

MARK	No REQ'D	SPAN
B11	ONE	2
B12	ONE	2
B13	2	266
B14	2	347
B15	2	347
B16	2	347
B17	2	448
B18	2	448
B19	2	448
B20	ONE	6
B21	ONE	6

B36½x194x69'-8¼ 3/5
×69'-8¼ 3/5
×69'-8¼ 3/5
×69'-8¼ 3/5
×69'-8¼ 3/5
×69'-8¼ 3/5
×69'-7¼ 3/6
×69'-7¼ 3/6
×69'-7¼ 3/6
×69'-8¼ 3/5
B36½x194x69'-8¼ 3/5

ASTM A373 SPECIAL QUALITY

3/6	18 - Cov. PL 10x1x39'-0 - pa	ASTM A373 (Um)	
7/5	11 - PL G½"x2'-6½" - pb	1-B11, 4-B12, 1-B13, 1-B20, 3-B21	
	9 - PL G½"x2'-6½" - pc	1-B11, 8-B13, 2-B20	
	34 - PL G½"x2'-6½" - pd	1-B11, 4-B14-B16-B17-B19, 1-B20	
	39 - PL G½"x2'-6½" - pf	3-B11, 4-B14-B16-B17-B19-B20	
	8 - PL G½"x2'-6½" - pg	B13	
	41 - PL G½"x2'-6½" - ph	1-B11, 8-B12, 8-B15-B18, 5-B21	
	1 - PL G½"x2'-6½" - pk	B12	
	1 - PL G½"x2'-6½" - pm	B11	
	1 - PL ½"x1'-6 - pn	B11	
	5 - PL G½"x1'-6 - pp	B11-B12-B13-B21	
	9 - PL G½"x1'-6 - ps	B14-B16-B17-B19-B20	
	10 - PL G½"x1'-6 - pt	B13-B14-B16-B17-B19	
	2 - PL G½"x1'-6 - pv	B11-B12	
	10 - PL G½"x1'-6 - pw	B14-B16-B17-B19-B20-B11	
	11 - PL G½"x1'-6 - py	B13-B14-B16-B17-B19-B20	
	2 - PL G½"x1'-6 - paa	B13	
	10 - PL G½"x1'-6 - pab	2-B15-B18, 1-B12-B21	
7/5	12 - PL G½"x1'-6 - pac	2-B15-B18-B21, 1-B12-B20	

18 - PL 10x(23/32 TO 2 27/32 PIS)x11'-2 - MA } DETAILED ON SHT 1 DO NOT DUPLICATE
18 - PL 10x(23/32 TO 2 27/32 PIS)x11'-2 - MB }

(1/3) 10 - BEV. FILL 8½x(15/32 TO 3 5/32 PIS)x9 - fa (2-B13-B16, 1-B19)

(1/4) 12 - FILL 8½x3/8x9 - fd (2-B12 (B15-B21, 1-B11-B20-B18))
(1/3) 8 - BEV. FILL 8½x(15/32 TO 3 5/32 PIS)x9 - ff (2-B14, 1-B11-B17-B20)

¼ P WELD = 24-0
⅜ P WELD = 2440-0

SURFACES MARKED "C" TO BE COATED WITH A HOT MIXTURE OF WHITE LEAD & TALLOW.

RIVETS NONE
OPEN HOLES 15/16ϕ UNLESS NOTED
REAM NO
MILLING YES
PAINT ONE COAT AS PER SPECS EXCEPT "C" SURFACES & AS NOTED
WELDING YES
SHOP CONTACT SURFACES NO PAINT

SECT C-C FOR B19
SECT C-C & D-D FOR B13 & B16

SECT C-C FOR B17 & B18

SECT C-C & D-D FOR B11-B14-B15-B20-B21 & B12

SECT B-B FOR B13-B16 & B19

NO PAINT ONE COAT BOILED LINSEED OIL

SECT B-B FOR B12-B15-B18 & B21

NO PAINT ONE COAT BOILED LINSEED OIL.

SECT B-B FOR B11-B14-B17 & B20

SECT A-A & F-F FOR B13-B16 & B19

NO PAINT ONE COAT BOILED LINSEED OIL

SECT A-A & F-F FOR {B12 B15-B18 & B21}

NO PAINT ONE COAT BOILED LINSEED OIL

SECT A-A & F-F FOR {B11 B14-B17 & B20}

PAINT SECTION

CAMBER DIAGRAM

NOTES:
1. FOR GEN. NOTES & WELDING SPECS. SEE SHT E2
2. MAT'L ASTM A7 UNLESS NOTED

STRINGERS B11 TO B21

INTERSTATE #95
OVER MAINE CENTRAL R.R. & COUNTY ROAD 6(33) 133
WATERVILLE, MAINE

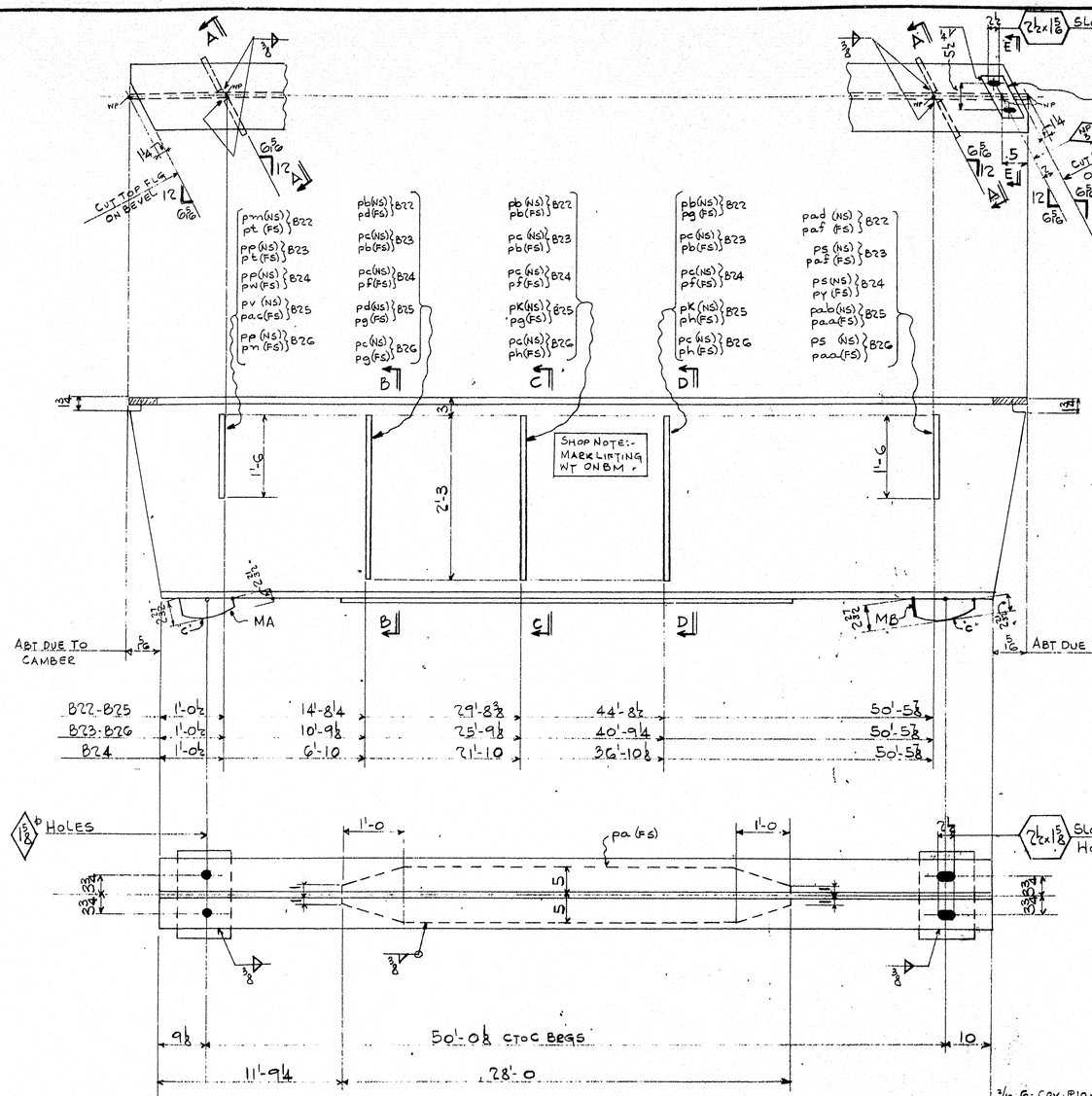
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM (HOUSE) BETH. WORKS
IN CHARGE NATHAN LEGGE MADE BY JT 12/16/58
CHECKED BY R 12-19-58 TRACED BY
REVISED LAST ASSEM. MK.

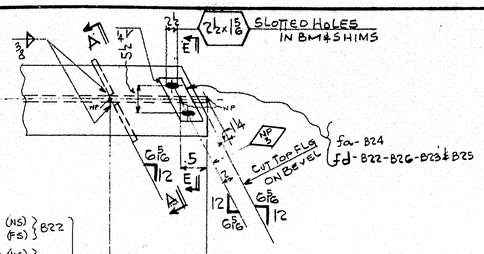
TEMP. / SUPT. / LAYOUT / FITTER / SHOP INSP. / PO. WK. / S. SMITH / MCH. / ERECT. / D. INSP. / WEIGHTS

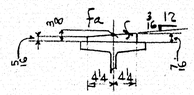
SHOP NO.
CONTRACT CP4434
SHEET 3

75-125 E

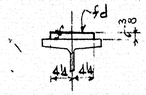
0 1 2 3 4 5 INCHES



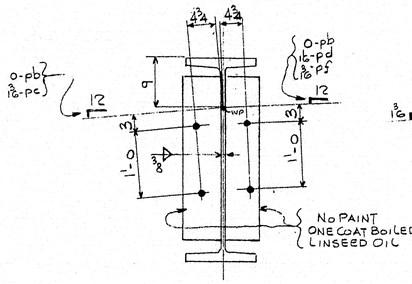




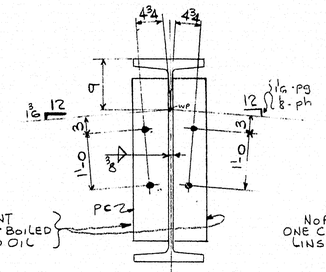
SECT. E-E FOR B24



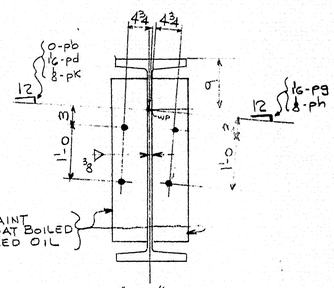
SECT. E-E FOR B22-B25-B26 & B23



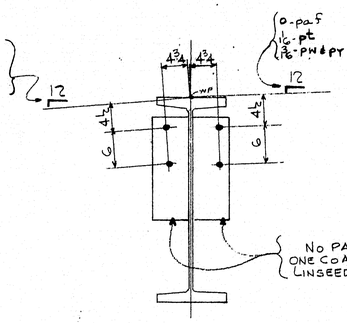
SECT. B-B & C-C FOR B22
SECT. B-B-C-C & D-D FOR B23 & B24



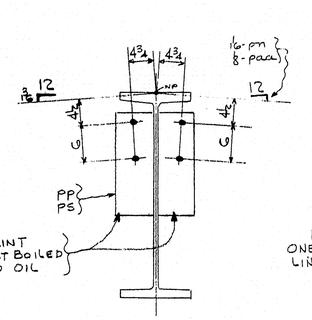
SECT. B-B-C-C & D-D FOR B26



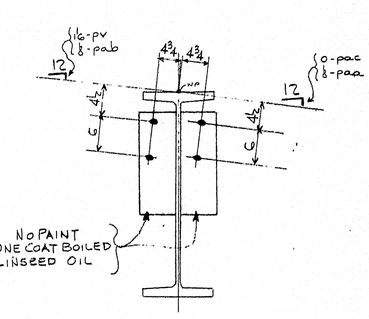
SECT. D-D FOR B22
SECT. B-B-C-C & D-D FOR B25



SECT. A-A FOR B22-B23 & B24



SECT. A-A FOR B26



SECT. A-A FOR B25

PAINT SECTION

CAMBER DIAGRAM

MARK	No REQ'D	SPAN
B22	ONE	1
B23	ONE	1
B24	2	145
B25	ONE	5
B26	ONE	5

B23⅛ x 130 x 51'-7¼ 3/12
x 51'-7¼ 3/12
x 51'-7¼ 3/12
B22⅛ x 130 x 51'-7¼ 3/12
} ASTM A373

SPECIAL QUALITY

2/B	6-Cov. PL 10 x ½ x 28'-0 - pa	(um) ASTM A373	
5/B	7- PL 6 x ½ x 2'-3 - pb	A-B22, B-B23	
	12- PL 6 x ½ x 2'-3 - pc	B23, B24, B26	
	2- PL 6 x ½ x 2'-3 - pd	B22, B25	
	6- PL 6 x ½ x 2'-3 - pf	B24	
	4- PL 6 x ½ x 2'-3 - pg	2-B25, 1-B22-26	
	3- PL 6 x ½ x 2'-3 - ph	2-B26, 1-B25	
	2- PL 6 x ½ x 2'-3 - pK	B25	
	1- PL 6 x ½ x 1'-6 - pm	B22	
	1- PL 6 x ½ x 1'-6 - pn	B26	
	4- PL 6 x ½ x 1'-6 - pp	B23, B24, B26	
	4- PL 6 x ½ x 1'-6 - ps	B23, B24, B26	
	2- PL 6 x ½ x 1'-6 - pt	B22-B23	
	1- PL 6 x ½ x 1'-6 - pv	B25	
	2- PL 6 x ½ x 1'-6 - pw	B24	
	2- PL 6 x ½ x 1'-6 - py	B24	
5/B	2- PL 6 x ½ x 1'-6 - paa	B25, B26	
5/B	1- PL 6 x ½ x 1'-6 - pab	B25	
5/B	1- PL 6 x ½ x 1'-6 - pac	B25	
5/B	1- PL 6 x ½ x 1'-6 - pad	B22	} SPECIAL QUALITY
5/B	2- PL 6 x ½ x 1'-6 - paf	B22-B23	
	RI		
	G- PL 10 x (2 23/32 TO 2 25/32 PIS) x 1'-2 - MA		} DETAILED ON SH #1
	G- PL 10 x (2 31/32 TO 2 33/32 PIS) x 1'-2 - MB		} DO NOT DUPLICATE

(1/8) 2-BEV FILL ⅜ x (2⅝ TO 2⅞ PIS) x 9'-5 - fa B24

(1/4) 4-FILL ⅜ x ⅜ x 9 - fd { B22 & B26 / B25 & B25
¼ D WELD x 3'-6"
⅜ D WELD, GO 5'-0

SURFACES MARKED "C" TO BE COATED WITH A HOT MIXTURE OF WHITE LEAD & TALLOW

RIVETS NONE
OPEN HOLES 15/16 UNLESS NOTED
REAM NO
MILLING YES
PAINT ONE COAT AS PER SPECS EXCEPT 2" SURFACES & AS NOTED
WELDING YES
SHOP CONTACT SURFACES NO PAINT

Notes
1- FOR GEN. NOTES & WELDING SPECS SEE SH #2
2- MAT'L ASTM A7 UNLESS NOTED

STRINGERS B22 TO B26

INTERSTATE #95 Proj
OVER MAINE CENTRAL R.R. & COUNTY ROAD 6(13)133
WATERVILLE, MAINE

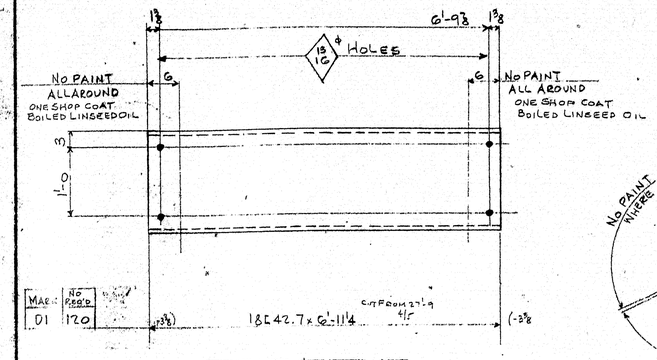
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM BETH. WORKS (HOOVER)
IN CHARGE NATH'AN ROSE MADE BY FT 12/16/58
CHECKED BY JC 12-20-58 TRACED BY
REVISED R1-JC 1/22/59 LAST ASSEM. MK.

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PO. WK.	
R. SMITH	
MCH.	
ERECT.	
O. INSP.	
WEIGHTS	

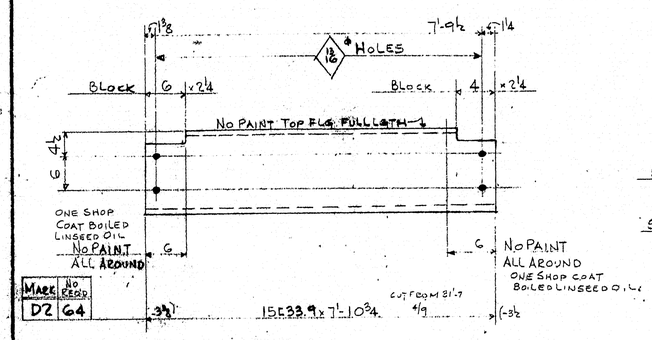
SHOP NO.
CONTRACT CP4434
SHEET 4

5200-In-3.58-BSCH

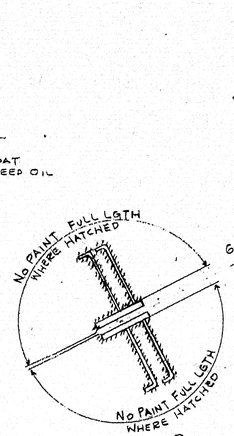
75-125 F

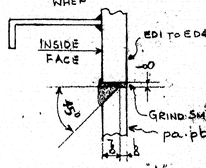


SPAN	1	2	3	4	5	6	7	8
No. REQ	12	16	16	16	12	16	16	16



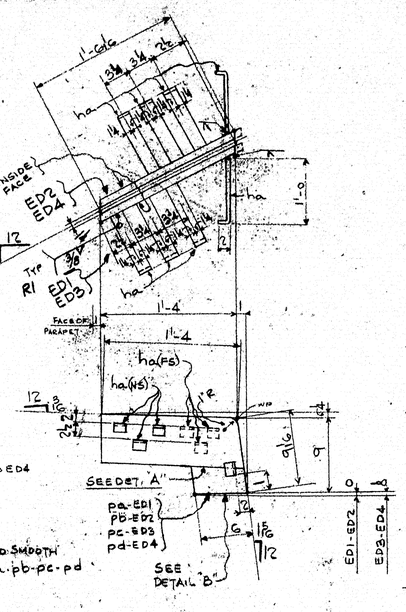
SPAN	1	2	3	4	5	6	7	8
No. REQ	8	8	8	8	8	8	8	8

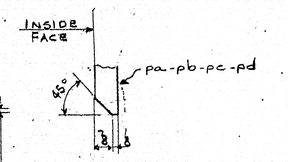




DETAIL "A"

WELDING OF 1" PS





DETAIL B

GRIND EDGE OF R pa-pb-pc-pd

SHIP TOGETHER
- ED1-R6x1x1'-7 1/2 ± (ONE REQ'D) 8/5
- ED2-R6x1x1'-7 1/2 ± (ONE REQ'D) 8/5

SHIP ONE OF EACH TOGETHER
- ED3-R6x1x1'-7 1/2 ± (11 REQ'D) 8/5
- ED4-R6x1x1'-7 1/2 ± (11 REQ'D) 8/5

	SPANS					
	1	2	3	5	6	7
1						
1	2	2	2	2	2	2

9 G-R3 1/2x3 1/2x1'-2 -ha BENT 9/6

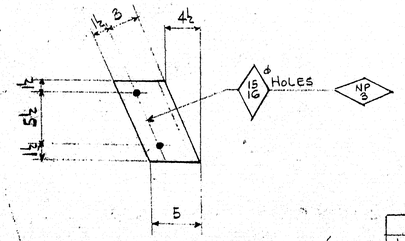
- 1-R3 1/2x1x6 -pa ED1
- 1-R3 1/2x1x6 -pb ED2
- 11-R3 1/2x1x6 -pc ED3
- 11-R3 1/2x1x6 -pd ED4

8/5

1/8 ▽ WELD x 13'-0

3/16 △ WELD x 4'-0

R1



	SPANS						
	1	2	3	5	6	7
60-SHIMS 8 1/2 x 4 x 9 1/2 - M1 1/16	10	10	10	10	10	10
120-SHIMS 8 1/2 x 8 x 9 1/2 - M2 1/8	20	20	20	20	20	20

DIAPHRAGMS & SIDEWALK DAMS

RIVETS NONE
OPEN HOLES AS NOTED
REAM NO
MILLING NO
PAINT ONE COAT AS PER SPECS UNLESS NOTED
WELDING YES
SHOP CONTACT SURFACES NO PAINT

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
O. INSP.	
WEIGHTS	

INTERSTATE #95

OVER MAINE CENTRAL R.R. & COUNTY ROAD PROJ. C(22)123

WATERVILLE MAINE

BETHLEHEM STEEL COMPANY

FABRICATED STEEL CONSTRUCTION

BETHLEHEM DRAFTING ROOM BETH. WORKS

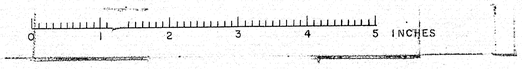
IN CHARGE NATHAN S. ROSS (HOOVER) MADE BY FT 12/16/58

CHECKED BY C 12-26-58 TRACED BY

REVISED R1-KH 12/22/59 LAST ASSEM. MK.

SHOP NO. CONTRACT CP1434 SHEET 5

75-125 C



TEMP. ANGLES @ 5'-0" CC (±)

CUT ON BEVEL

ED7 ED9 ED10

ED5 ED6 ED8

SLOTTED HOLES TYPICAL

GUTTER LINE

TYPICAL

SPLICE SEE DETAIL "A"

CROWN

WORKLINE

EDS-EDG-ED8

ED10 / ED7-ED9

35'-0

17'-6

8'-5⅝

5'-0⅛

4'-2⅜

3'-4⅛

3¼

9

2½

pK - ED5
pm - EDG
pn - ED7
pp - ED8
ps - ED9
pt - ED10

No PAINT TOP OF RS

HORIZONTAL

pa (TYP)

ha - ED5
hb EDG
hc - ED7
hd - ED8
hf . ED9
hg . ED10

4 SPA @ 1'-7¼ = 6'-5 (5-pa)

1'-8

2'-0

1'-0

ph - ED5
pb - EDG
pc - ED7
pd - ED8
pf - ED9
pg - ED10

pe - ED5
pd - EDG
pf - ED7
pg - ED8
ph - ED9
pK - ED10

No PAINT FULL LENGTH WHERE HATCHED

WP

SPLICE GRIND SMOOTH

WORK LINE

R10x1

L6x6x¾

PLAN

ELEV.

DETAIL "A"

SECT B-B

3 x 1⅜ SLOTTED HOLE IN ma

⅝ HOLE IN mb

¾ ø BOLT

TACK WELD

(SHOP NOTE:- TIE BOTTOM FOR SHIPT WHERE NECESSARY)

SECT A-A (TYP @ 5'-0 c/c)

TEMP. ANGLES FOR SHIPT AND ERECTION TO HOLD DAMS IN PROPER ALIGNMENT

PAINT SECT.

HOLES MARKED WP BOTH SIDES OF MATERIAL ADJACENT TO OPEN HOLES MUST BE FREE OF MILL SCALE, LOOSE SCALE AND PAINT FOR A DISTANCE OF 2 INCHES FROM THE EDGE OF HOLE

EXPANSION DAMS

32'-10½
27'-1⅞
STA. ABT. ℄ CROWN
PARABOLIC CURVE
STRAIGHT LINE
ED5 & ED10
GRIND TOP
EDG & ED7
ED8 & ED9
℄ HORIZ

OFFSETS FROM HORIZ. LINE FOR DAMS

SPANS	1	2	3	5	6	7
	1	1		1	1	
			1			
	1					

SHIP TOGETHER IN PAIRS — ED10 (4 REQ'D) / ED5 (4 REQ'D)

SHIP TOGETHER — EDG (ONE REQ'D) / ED7 (ONE REQ'D)

SHIP TOGETHER — ED8 (ONE REQ'D) / ED9 (ONE REQ'D)

1-R10x1x17'-4½" - pK	ED5	Cut from 35'-0 7/8
1-R10x1x17'-4⅜" - pm	EDG	
1-R10x1x17'-8⅜" - pn	ED7	
1-R10x1x17'-4⅜" - pp	ED8	
1-R10x1x17'-8⅜" - ps	ED9	
1-R10x1x17'-8⅜" - pt	ED10	
1-R10x1x17'-8⅜" - ph	ED5	
1-R10x1x17'-8⅜" - pb	EDG	
1-R10x1x17'-8⅜" - pc	ED7	
1-R10x1x17'-8⅜" - pd	ED8	
1-R10x1x17'-8⅜" - pf	ED9	
1-R10x1x17'-8⅜" - pg	ED10	

240 RIVS. ⅞ ø
42 - L6x3½x¾ - ma
42 - L6x3½x⅜ - mb
42 TO BE ¾ ø H.T.B.
TEMP. SHIPPING ℄

⅜ WELD ALL
⅝ WELD BOTH ℄ OF INTER-MEDIATE ⅝ ø
T R10-0
T 11-5

1-L6x6x¾x17'-7⅞" - ha	BENT	ED5
1-L6x6x¾x17'-7⅞" - hb		EDG
1-L6x6x¾x17'-7⅞" - hc		ED7
1-L6x6x¾x17'-7⅞" - hd		ED8
1-L6x6x¾x17'-7⅞" - hf		ED9
1-L6x6x¾x17'-7⅞" - hg	BENT	ED10
1-L6x6x¾x17'-7⅞" - mc		ED5
1-L6x6x¾x17'-7⅞" - md		EDG
1-L6x6x¾x17'-7⅞" - me		ED7
1-L6x6x¾x17'-7⅞" - mf		ED8
1-L6x6x¾x17'-7⅞" - mg		ED9
1-L6x6x¾x17'-7⅞" - mh		ED10
1-L6x6x¾x17'-7⅞" - mK		ED10

Cut from 35'-9 c/c

RIVETS NONE
OPEN HOLES AS NOTED
REAM NO
MILLING NO
PAINT ONE COAT AS PER SPECS UNLESS NOTED
WELDING TES
SHOP CONTACT SURFACES NO PAINT

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
S. SMITH	
MCH.	
ERECT.	
O. INSP.	
WEIGHTS	

INTERSTATE #95 — PROJ.
OVER MAINE CENTRAL R.R. & COUNTY ROAD 6/23/129
WATERVILLE, MAINE
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM BETH. WORKS (Hoover)
IN CHARGE NATHANIEL ROSS MADE BY JT 10/15/58
CHECKED BY K 10-22-58 TRACED BY
REVISED 11-20-58 11/21/58 LAST ASSEM. MK.
SHOP NO. CONTRACT CP4434 SHEET 6

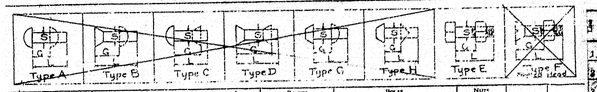
75-125 H

2310-10m-12.53-BSCo

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION

BETH DRAFTING ROOM BETH WORKS

SUMMARY OF FIELD RIVETS AND BOLTS



Line	Number of rivets or bolts	(Net)	Connecting	Rivets Diam. S	Rivets Type	Rivets Grip	Rivets Length	Bolts Type	Bolts Head Hex-Sq	Bolts Grip S	Bolts Length L	Bolts Length Nut Incl.	Nuts No.	Nuts Hex. or Sq.	Item	Weight
1	775		TOP DIAPHS. TO STRING.	3/4				E	SQ		2	STD	775	SQ	801-4829	
2			3% Excess = 5%													
3																
4			AM. STD. REG.													

Summary of Sheet Nos. 1 ..... Total Weight this Page .....

All bolts over 1 1/4" ϕ and 2'-6" in length to be billed as shop or mob. Form No. 2246.
For bolts or rivets of special design, draw sketch of this kind.

Gen'l Supt. / Shop Supt. — Layout / Fitter — Temp. Shop / Mech. Shop — Smith Shop / Rod Shop — Loader / Skipper — Scale / Bill — Purch. Dept. / Owners — Erection / S. Insp. — O. Insp. / Appl. —

In Charge of (Hoover) NATHAN B. POSS — Made by FT — Date 12/22/58 — Checked by ..... — Date .....

Bill Page No. ..... — Shop No. .....

Contract CP1434 — Page No. M 1 — Use as B.P.P.

Customer CALLAHAN BROS INC. — Structure INTERSTATE #95 WATERVILLE MAINE

16

2311-11m-3.54-BSCo

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION

BETH DRAFTING ROOM BETH WORKS

BILL OF MISCELLANEOUS MATERIAL

Line	No.	Description	Mark or Item No.	Weight	Requisition No.	Order No.
1						
2	240	7/8" x 2 1/4" HARDENED CUT STEEL WASHERS			801-4829	
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19		HARD. WASH. FOR A325 BOLTS AT EXP. DAM. CONNECTIONS				
20						
21						
22						
23						
24						
25						
26						
27						
28						

Material: .....
Specifications: ASTM A325
Machining: .....
Paint: NONE
Shipment: SHIP WITH A325 BOLTS ON SHEET** SBH1
Inspection: .....
Remarks: .....

Gen'l Supt. / Shop Supt. — Layout / Fitter — Temp. Shop / Mech. Shop — Smith Shop / Bld Shop — Loader / Skipper — Scale / Bill — Purch. Dept. / Owners — Erection / S. Insp. — O. Insp. / Appl. — Stores

In Charge of (Hoover) NATHAN B. POSS — Made by FT — Date 12/22/58 — Checked by ..... — Date .....

Bill Page No. ..... — Shop No. .....

Contract CP1434 — Bill Page No. M 3 — Use as B.P.P.

Customer CALLAHAN BROS INC. — Structure INTERSTATE #95 WATERVILLE MAINE

16

2311-11m-3.54-BSCo

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION

BETH DRAFTING ROOM BETH WORKS

BILL OF MISCELLANEOUS MATERIAL

Line	No.	Description	Mark or Item No.	Weight	Requisition No.	Order No.
1		(160 NET)				
2	165	STD WASHER 3" x 1/4 THK - 1 1/16" HOLE	WI			RES.
3						
4		(USED UNDER NUTS OF ANCH. BOLTS)				
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						

Material: ASTM A7
Specifications: MAINE STATE HIGHWAY COMMISSION
Machining: .....
Paint: ONE SHOP COAT AS PER SPECS
Shipment: SHIP WITH 1ST CARLOAD OF STEEL
Inspection: .....
Remarks: FIELD WASHERS

Gen'l Supt. / Shop Supt. — Layout / Fitter — Temp. Shop / Mech. Shop — Smith Shop / Rod Shop — Loader / Skipper — Scale / Bill — Purch. Dept. / Owners — Erection / S. Insp. — O. Insp. / Appl. — Stores

In Charge of (Hoover) NATHAN B. POSS — Made by FT — Date 12/9/58 — Checked by R — Date 12-8-58

Bill Page No. ..... — Shop No. .....

Contract CP1434 — Bill Page No. M 2 — Use as B.P.P.

Customer CALLAHAN BROS INC MECHANIC FALLS MAINE — Structure PROJ # 6(32)123 WATERVILLE MAINE

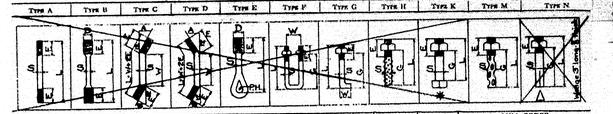
6

2208-2m-2.53-BSCo

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION

BETH DRAFTING ROOM BETH WORKS

BILL OF RODS



Line	No. of rods	Mark	Type	Spec. Item No.	Rods Length Ft.	Rods Length In.	Rods Bend. A	Rods Bend. B	Rods Detail Information Screw E	Rods Detail Information Screw D	Rods Detail Information Direct	Rods Detail Information Pin Dia. Ins. Ctrs.	Rods Detail Information Pin Dia. Ins. Ctrs.	Rods Detail Information Pin Dia. Ins. Ctrs.	Nuts No.	Nuts Sq. or Hex.	Mill Order Weight each with nuts	Mill Order No. of pcs.	Mill Order Section	Mill Order Length Ft.	Mill Order Length In.	Item
1	160	AB1	M	14	2	0	-	-	4	-	RH				160	HEX						RES.
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						
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21																						
22																						
23																						
24																						
25																						
26																						
27																						
28																						

AMER. STD. HEAVY

SPECS: ASTM A7

ADVANCE SHIPMENT

Total Weight of Material on this Page ..... Paint — NO PAINT OIL THDS

*Mill all Type K bolts 3/4" ϕ to 1 1/4" ϕ incl. up to 2'-0" incl. in length on bolt list, form 2210.

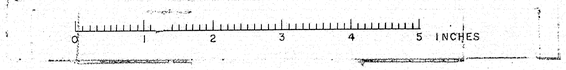
Gen'l Supt. / Shop Supt. — Layout / Fitter — Temp. Shop / Mech. Shop — Smith Shop / Rod Shop — Loader / Skipper — Scale / Bill — Purch. Dept. / Owners — Erection / S. Insp. — O. Insp. / Appl. — Stores

In Charge of (Hoover) NATHAN B. POSS — Made by TT — Date 12/4/58 — Checked by R — Date 12-8-58

Bill Page No. ..... — Shop No. .....

Contract CP1434 — Bill Page No. M 1 — Use as B.P.P.

Customer CALLAHAN BROS INC MECHANIC FALLS MAINE — Structure PROJ # 6(32)123 WATERVILLE, MAINE



2210-10m-12,53-USCo

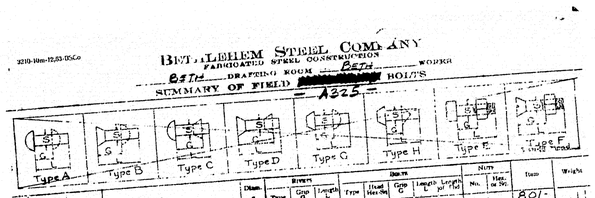
BETHLEHEM STEEL COMPANY

FABRICATED STEEL CONSTRUCTION

BSTd DRAFTING ROOM BSTd WORKS

SUMMARY OF FIELD [redacted] BOLTS

= A325 =



Mark	Number of Pieces or Bolts	NET	Connecting	Diam. B	Washers Type	Washers Grip G	Washers Length L	Bolts Type	Bolts Head Style-Dim.	Bolts Grip G	Bolts Length	Bolts Length per Foot	Nuts No.	Nuts Heavy Hex or Semi	Item	Weight
1	25	20	36WF150 & 33WF130 TO ANCH	7/8				A325	HEX	3	STD		25	HEX	801-4828	
2	105	100	36WF194 TO 5 KP BMS.	7/8				A325	HEX	4	STD		105	HEX	1	
3			10 EXCESS = 8%													
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
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16																
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23																
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25																
26																
27																
28																
29																
30																

ASTM-A325 HIGH STRENGTH BOLTS (NUTS ON BOLTS)

TOTAL WEIGHT THIS PAGE

SUMMARY OF SHEET NOS. 1

ALL BOLTS OVER 1 1/2" Ø AND 2'-0" IN LENGTH TO BE BILLED AS BOOK OR KOB FORM NO. 3208.
FOR BOLTS OR RIVETS OF SPECIAL GRADES, BILL UNDER OTH THIS HEADING

Grd'l Surf. ☐ Lettered ☐ Bmkg. Shop ☐ Stitch Shop ☐ Loads ☐ Scale ☐ Punch Dept ☐ Stairbld ☐ O. Iron ☐
Shop Surf. ☐ Fitted ☐ Mach Shop ☐ Mat'l Shop ☐ Shipped ☐ Mill ☐ Owners ☐ S. Iron ☐ Angl ☐

CONTRACT 304 1 CP4134

To Charge of (HAUVER)

Mark by FT Date 11-5-13

Checked by Date

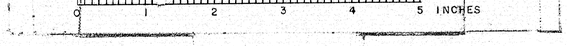
Rec'd Date

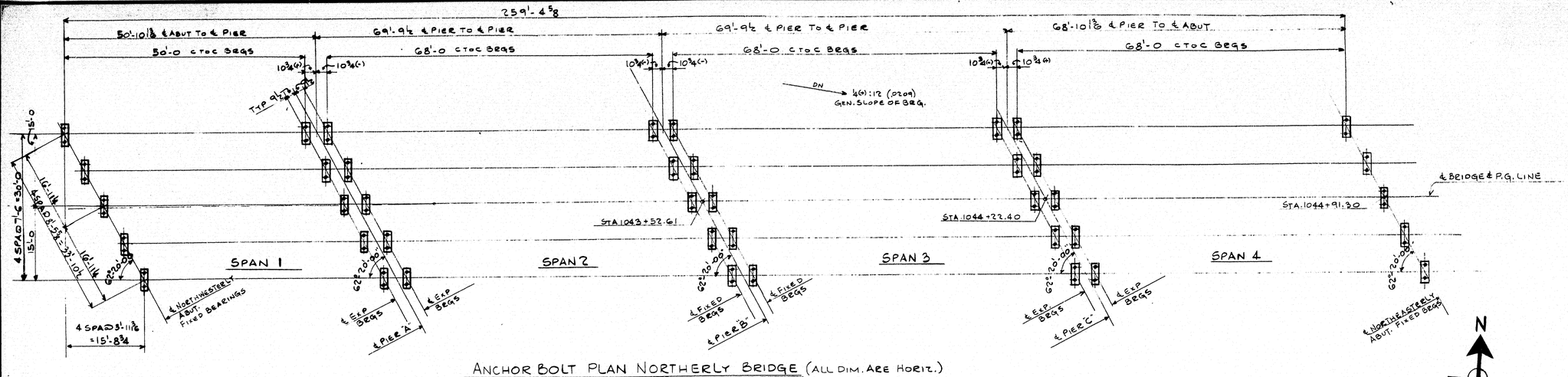
Shop no.

Use as B.F.P.

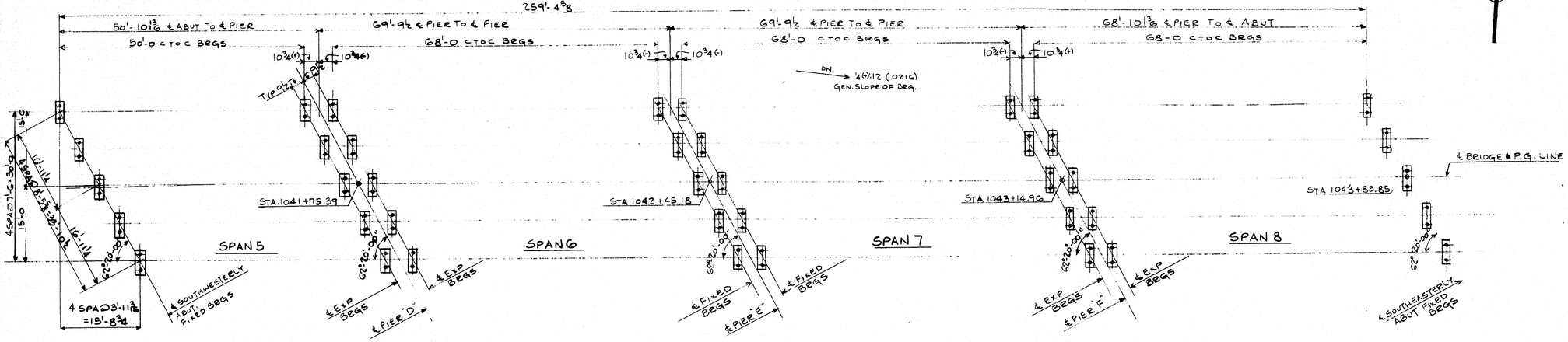
NATHANEROSS

Purchaser CALLAHAN BROS INC Structure INTERSTATE #95 WATERVLLE MAINE





ANCHOR BOLT PLAN NORTHERLY BRIDGE (ALL DIM. ARE HORIZ.)



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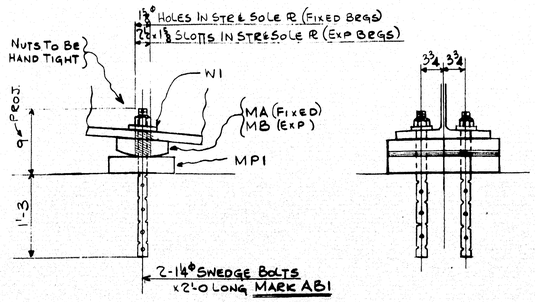


EXP & FIXED BRG DETAIL

ERECTOR NOTE:- SOLE RS MA & MB ARE SHIPPED WITH STRINGERS

NOTES:-

1.- DIMENSIONS ON THIS PLAN MUST BE STRICTLY ADHERED TO OTHERWISE STEEL WILL NOT FIT. NOTIFY B.S CO. AT ONCE INCASE OF ERROR
2.- ANCHOR BOLTS FURNISHED BY B.S. CO. AND SET BY OTHERS
3.- BEARING PREPARATIONS BY OTHERS
4.- FOR GENERAL NOTES SEE SHEET E2.

ANCHOR BOLT PLAN

RIVETS
OPEN HOLES
REAM
MILLING
PAINT
WELDING
SHOP CONTACT SURFACES

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
Q. INSP.	
WEIGHTS	

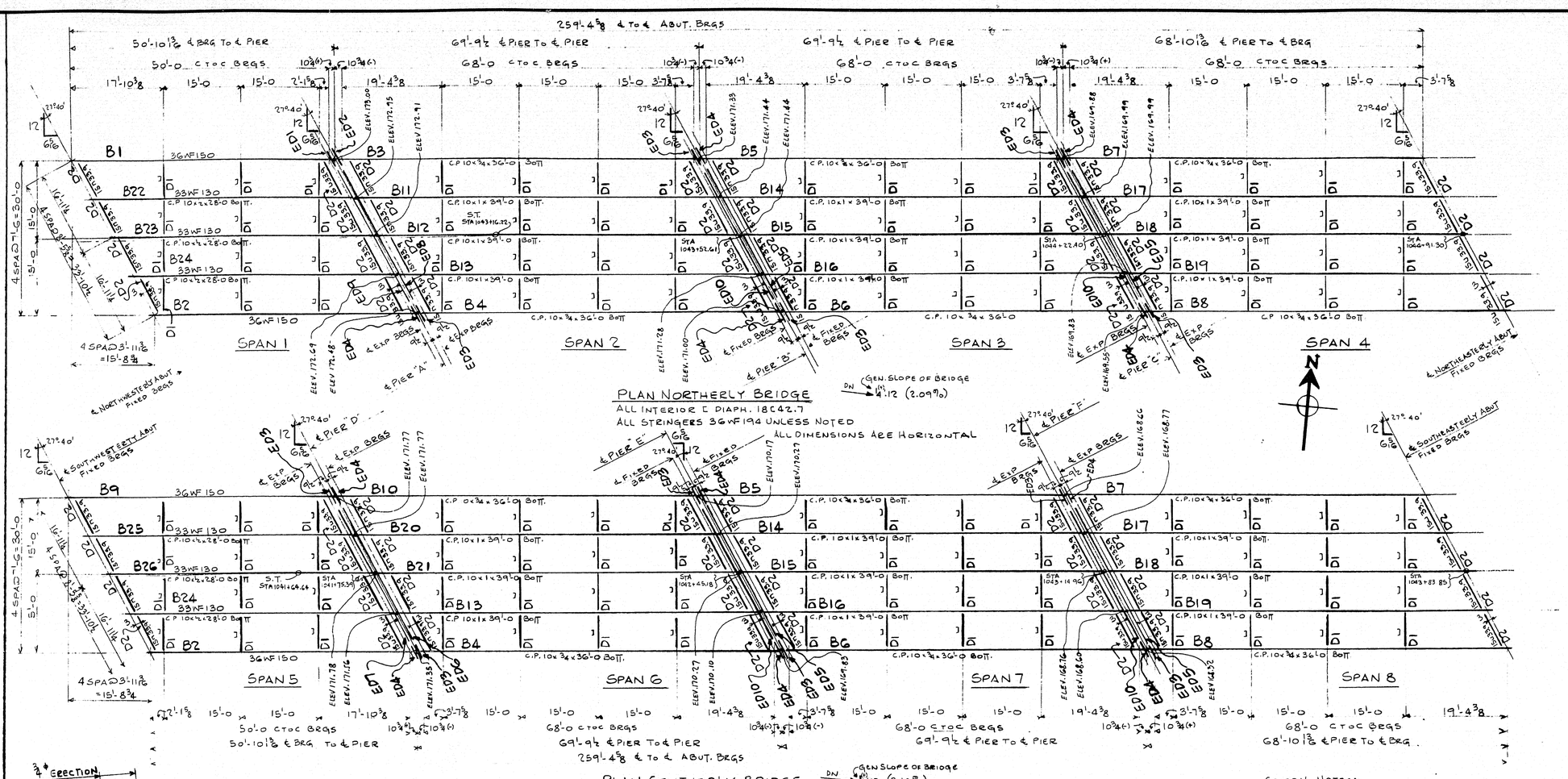
INTERSTATE #95
OVER MAINE CENTRAL R.R & COUNTY ROAD PROJ 6(25) 123
WATERVILLE, MAINE CUST: CALLAHAN BROTHS INC.

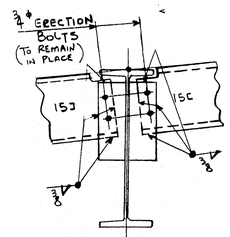
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM BETH WORKS
IN CHARGE NATWANASS (MOUSE) MADE BY JT 12/4/58
CHECKED BY R 12-12-58 TRACED BY
REVISED LAST ASSEM. MK.

SHOP NO. CONTRACT CP4434 SHEET E1

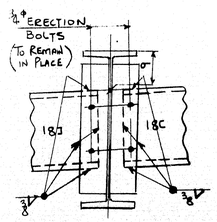
75-125A

0 1 2 3 4 5 INCHES





Typical Welding of End Diaph.



Typical Welding of Int. Diaph

Typical Expansion Dam Detail

Sect. A-A

General Notes:-

1. Erection - By others
2. Mat'l Specs: A S T M-A7 unless noted
3. Workmanship Specs: State of Maine State Highway Commission (Jan. 1956)
4. All holes, cuts, blocks etc. for other trades must be shown on this plan at time of approval, otherwise work must be done in the field at no expense to B. S. Co.
5. All welding shall conform to the current specs. For welded H'way & Railway Bridges of the American Welding Society.
6. Shop Paint:- One coat as per specs
7. Field Paint:- Furnished & applied by others
8. Field Connections to be welded or A325 bolted as shown
9. All Erection Bolts to remain in place
10. Railing, Railing Anchor Bolts, Field Weld Wire, Drift Pins, Fitting up Bolts, Bearing Preparation material, All Drainage material, Spirals, Studs, and Erection Shims are by others.

Framing Plan

Temp.	
Supt.	
Layout	
Fitter	
Shop Insp.	
Pc. Wk.	
S. Smith	
Mech.	
Ernest.	
O. Insp.	
Weights	

Rivets
Open Holes
Ream
Milling
Paint
Welding
Shop Contact Surfaces

Shop No.

Interstate #95
Over Maine Central R.R. & County Road Proj 6(23)123
Waterville, Maine

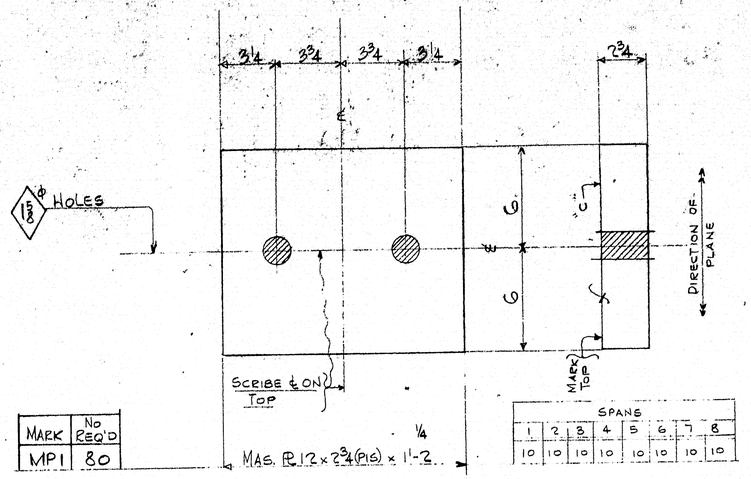
Bethlehem Steel Company
Fabricated Steel Construction

Bethlehem Drafting Room B&TM Works
In charge Nathan (Hoover) & Boss Made by JT 12/5/57
Checked by R 12-22-58 Traced by
Revised Last Assem. Mk.

Contract CP1434 Sheet E2

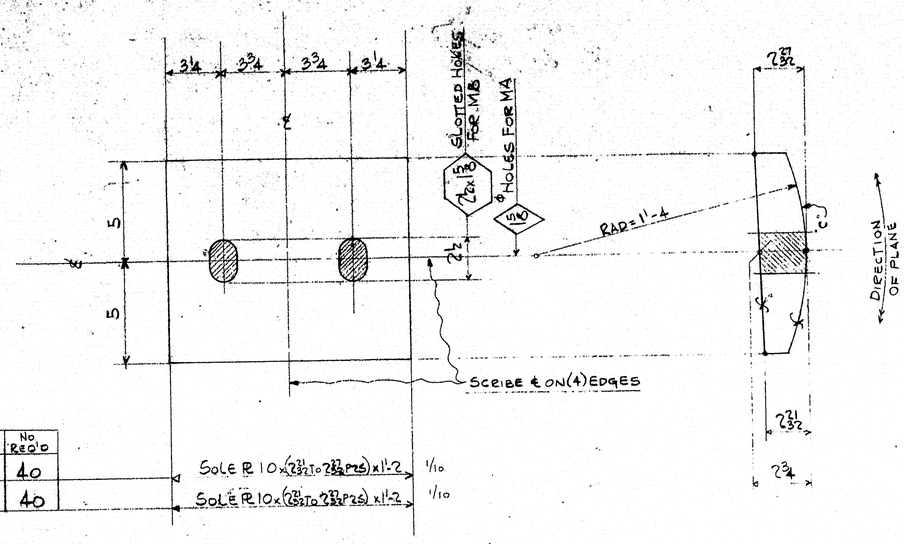
2300-800-11,56-20Co

75-125 B



MARK	No REQ'D
MP1	80

SPANS							
1	2	3	4	5	6	7	8
10	10	10	10	10	10	10	10



MARK	No REQ'D	
MA	40	SOLE PL 10 x (2 31/32 TO 2 27/32 P2S) x 1'-2 1/10
MB	40	SOLE PL 10 x (2 31/32 TO 2 27/32 P2S) x 1'-2 1/10

SHOP NOTES:-
1. PLATES TO BE PRESS STRAIGHTENED WHERE NECESSARY TO INSURE FLATNESS.
2. SURFACES MARKED "C" TO BE COATED WITH A HOT MIXTURE OF WHITE LEAD & TALLOW
3. SOLE PLATES ARE NOT TO BE PAINTED UNTIL AFTER ASSEMBLY TO STRINGERS
4. MAT'L SPECS AST M A7
5. WORKMANSHIP SPECS. MAINE STATE HIGHWAY COMMISSION

RIVETS NONE
OPEN HOLES AS NOTED
REAM NO
MILLING AS NOTED
PAINT ONE COAT AS PER SPECS EXCEPT "C" SURFACES AS NOTED
WELDING NO
SHOP CONTACT SURFACES NO

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PR. WK.
S. SMITH
MCH.
SHOT.
G. INSP.
WEIGHTS

SHOP NO.

BEARING DETAILS

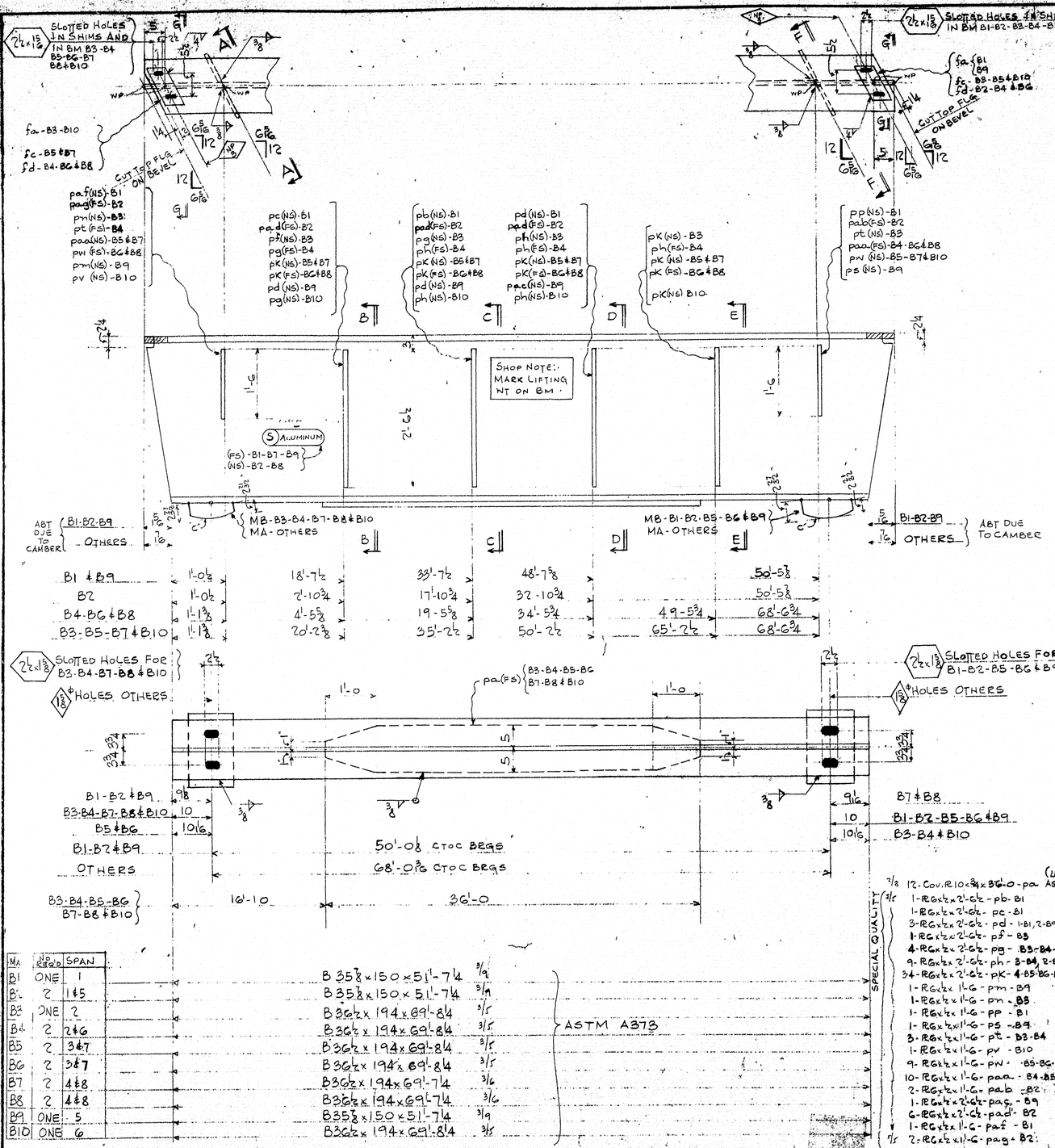
INTERSTATE #95
OVER MAINE CENTRAL R.R. & COUNTY ROAD PROJ 6(12) X1
WATERVILLE, MAINE - CUST: CALLAHAN BROTHS INC.

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM BETH. (Houses) WORKS
IN CHARGE NATHANIEL ROSS MADE BY H 12/4/56
CHECKED BY R 12-15-56 TRACED BY
REVISED LAST ASSEM. MK.

CONTRACT CP4424 SHEET 1

75-125 C

0 1 2 3 4 5 INCHES



MA	NO REQ'D	SPAN
B1	ONE	1
B2	2	1&5
B3	ONE	2
B4	2	2&6
B5	2	3&7
B6	2	3&7
B7	2	4&8
B8	2	4&8
B9	ONE	5
B10	ONE	6

B 35⅞ x 150 x 51'-7⅝ 9/16
B 35⅞ x 150 x 51'-7⅝ 9/16
B 36½ x 194 x 69'-8¼ 3/5
B 36½ x 194 x 69'-8¼ 3/5
B 36½ x 194 x 69'-8¼ 3/5
B 36½ x 194 x 69'-8¼ 3/5
B 36½ x 194 x 69'-8¼ 3/16
B 36½ x 194 x 69'-8¼ 3/16
B 35⅞ x 150 x 51'-7⅝ 9/16
B 36½ x 194 x 69'-8¼ 3/5
} ASTM A373

SPECIAL QUALITY (um) ASTM A373 (B3-B4-B5 BG-B7 B8-B10)

7/8	12-Cov.R10x3¾x36'-0-pa
9/16	1-RGx½x2'-6½-pb-B1
	1-RGx½x2'-6½-pc-B1
	3-RGx½x2'-6½-pd-1-B1,2-B9
	1-RGx½x2'-6½-pf-B3
	4-RGx½x2'-6½-pg-B3-B4-B10
	9-RGx½x2'-6½-ph-3-B4, 2-B10, 1-B3
	34-RGx½x2'-6½-pK-4-B5-BG-B7-B8, 1-B3, 1-B10
	1-RGx½x1'-6-pm-B9
	1-RGx½x1'-6-pn-B3
	1-RGx½x1'-6-pp-B1
	1-RGx½x1'-6-ps-B9
	3-RGx½x1'-6-pt-B3-B4
	1-RGx½x1'-6-pv-B10
	9-RGx½x1'-6-pw-B5-BG-B7-B8-B10
	10-RGx½x1'-6-paa-B4-B5-BG-B7-B8
	2-RGx½x1'-6-pab-B2
	1-RGx½x2'-6½-pag-B9
	6-RGx½x2'-6½-pad-B2
	1-RGx½x1'-6-paf-B1
7/16	2-RGx½x1'-6-pag-B2

SECT. G-G FOR B2-B4-BG&B8

SECT. G-G FOR B1-B3-B5-B7-B9&B10

SECT. B-B&C-C FOR B1

SECT. B-B-C-C-D-D FOR B3-B5-B7 B9&B10

SECT. D-D FOR B1

SECT. E-E FOR B3-B5-B7&B10

SECT. B-B-C-C-D-D FOR B2-B4-BG&B8

SECT. E-E FOR B4-BG&B8

SECT. A-A FOR B1&B9

SECT. A-A-F-F FOR B3 B5-B7&B10

SECT. F-F FOR B1-B9

SECT A-A-F-F FOR B2-B4-BG&B8

PAINT SKETCH

CAMBER DIAGRAM

4-FILL 8x½x3⅜x9 -fa B1-B3-B9-B10 (10/4)

8-Bev. FILL 8½x(15/16 TO 3⅜ PIS)x9-fc 2-B5,1-B7,1-B3,1-B10 (2/3)
12-Bev. FILL 8½x(15/16 TO 3⅜ PIS)x9-fd 2-B4&BG, 1-B2&B8

16-R10x(2⅜ TO 2¾ PIS)x1'-2-MA DET. ON SH#1
16-R10x(2⅜ TO 2¾ PIS)x1'-2-MB DO NOT DUPLICATE

¼ ▷ WELD x 19-0
⅜ ▷ WELD x 1340-0

RIVETS NONE
OPEN HOLES 15/16ϕ UNLESS NOTED
REAM NO
MILLING YES
PAINT ONE COAT AS PER SPECS EXCEPT C' SURFACES & AS NOTED
WELDING YES.
SHOP CONTACT SURFACES NO PAINT

SURFACES MARKED "C" TO BE COATED WITH A HOT MIXTURE OF WHITE LEAD & TALLOW

NOTES:-
1- FOR GEN. NOTES & WELDING SPECS, SEE SHT E2
2- MAT'L ASTM-A7 UNLESS NOTED

STRINGERS B1 TO B10

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PG. WK.	
B. SMITH	
MCH.	
ERECT.	
O. INSP.	
WEIGHTS	

INTERSTATE #95
OVER MAINE CENTRAL R.R. & COUNTY ROAD 6(23) 113
WATERVILLE, MAINE

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM BETH WORKS
IN CHARGE NATHAN HOOVER CROSS MADE BY JT 12/11/58
CHECKED BY E 12-18-58 TRACED BY
REVISED LAST ASSEM. MK.

CONTRACT CP4434 SHEET 2
SHOP NO.

75-125 D

2½x15/16 SLOTTED HOLES IN SHIMS & BM

fd {B11-B15-B18-B21 / B12-B20
fa - B13-B16-B19
ff & B14-B17

pm(NS) pv(FS) B11
PP(NS) pv(FS) B12
PP(NS) paa(FS) B13
pv(NS) pt(FS) B14-B17
pab(NS) pac(FS) B15-B18
ps(NS) PW(FS) B16-B19
PY(NS) pac(FS) B20
PP(NS) pac(FS) B21

CUT TOP FLG ON BEVEL

pf(NS) pb(FS) B11
pb(NS) ph(FS) B12
ph(FS) pc(NS) B13
pg(FS) pf(NS) B14-B17
pd(FS) ph(NS) B15-B18
ph(FS) pd(NS) B16-B19
pf(FS) pf(NS) B20
pb FS pb(NS) B21
ph(FS)

pf(NS) pc(FS) B11
pb(NS) ph(FS) B12
pc(NS) pg(FS) B13
pf(NS) pd(FS) B14-B17
ph(NS) ph(FS) B15-B18
pd(NS) pf(FS) B16-B19
pf(NS) pf(FS) B20
pb(NS) pc(FS) B21
ph(FS)

pf(NS) pd(FS) B11-B14-B17-B20
pb(NS) ph(FS) B12
ph(NS) pc(NS) B13
pg(FS) ph(NS) B15-B18-B21
pd(NS) pf(FS) B16-B19

pw(NS) pp(FS) B11
pac(NS) pab(FS) B12-B15-B18-B21
pt(NS) py(FS) B13-B16-B19
pw(NS) ps(FS) B14-B17-B20

SHOP NOTE: MARK LIFTING PT. ON BM.

ABT DUE TO CAMBER

MA-B14-B15-B16
MB-OTHERS

MB-B14-B15-B16
MA-OTHERS

ABT DUE TO CAMBER

B11-B14-B17-B20	1'-1 3/8	16'-3¼	31'-3¼	46'-3 3/8	61'-2 3/8	68'-6¾
B12-B15-B18-B21	1'-1 3/8	12'-4	27'-4	42'-4 3/8	57'-4 3/8	68'-6¾
B13-B16-B19	1'-1 3/8	8'-4 3/8	23'-4 3/8	38'-5	53'-5	68'-6¾

2½x15/16 SLOTTED HOLES IN B21 B11-B12-B13-B17-B18-B19-B20

1⅛ ϕ HOLES - B14-B15-B16

2½x1⅛ SLOTTED HOLES IN B14-B15-B16

1⅛ ϕ HOLES - OTHERS

pa(FS)

B14-B15-B16 OTHERS: 10½ / 10

B17-B18-B19: 9½
B11-B12-B13-B20-B21: 10½
B14-B15-B16: 10

68'-0 3/8 C TO C BRGS
15'-4
39'-0

MARK	No REQ'D	SPAN
B11	ONE	2
B12	ONE	2
B13	2	266
B14	2	347
B15	2	347
B16	2	347
B17	2	448
B18	2	448
B19	2	448
B20	ONE	6
B21	ONE	6

B36½x194x69'-8¼ 3/5
×69'-8¼ 3/5
×69'-8¼ 3/5
×69'-8¼ 3/5
×69'-8¼ 3/5
×69'-8¼ 3/5
×69'-7¼ 3/6
×69'-7¼ 3/6
×69'-7¼ 3/6
×69'-8¼ 3/5
B36½x194x69'-8¼ 3/5

ASTM A373 SPECIAL QUALITY

3/6	18 - Cov. PL 10x1x39'-0 - pa	ASTM A373 (Um)	
7/5	11 - PL G½"x2'-6½" - pb	1-B11, 4-B12, 1-B13, 1-B20, 3-B21	
	9 - PL G½"x2'-6½" - pc	1-B11, 8-B13, 2-B20	
	34 - PL G½"x2'-6½" - pd	1-B11, 4-B14-B16-B17-B19, 1-B20	
	39 - PL G½"x2'-6½" - pf	3-B11, 4-B14-B16-B17-B19-B20	
	8 - PL G½"x2'-6½" - pg	B13	
	41 - PL G½"x2'-6½" - ph	1-B11, 8-B12, 8-B15-B18, 5-B21	
	1 - PL G½"x2'-6½" - pk	B12	
	1 - PL G½"x2'-6½" - pm	B11	
	1 - PL ½"x1'-6 - pn	B11	
	5 - PL G½"x1'-6 - pp	B11-B12-B13-B21	
	9 - PL G½"x1'-6 - ps	B14-B16-B17-B19-B20	
	10 - PL G½"x1'-6 - pt	B13-B14-B16-B17-B19	
	2 - PL G½"x1'-6 - pv	B11-B12	
	10 - PL G½"x1'-6 - pw	B14-B16-B17-B19-B20-B11	
	11 - PL G½"x1'-6 - py	B13-B14-B16-B17-B19-B20	
	2 - PL G½"x1'-6 - paa	B13	
	10 - PL G½"x1'-6 - pab	2-B15-B18, 1-B12-B21	
7/5	12 - PL G½"x1'-6 - pac	2-B15-B18-B21, 1-B12-B20	

18 - PL 10x(23/32 TO 2 27/32 PIS)x11'-2 - MA } DETAILED ON SHT 1 DO NOT DUPLICATE
18 - PL 10x(23/32 TO 2 27/32 PIS)x11'-2 - MB }

(1/3) 10 - BEV. FILL 8½x(15/32 TO 3 5/32 PIS)x9 - fa (2-B13-B16, 1-B19)

(1/4) 12 - FILL 8½x3/8x9 - fd (2-B12 (B15-B21, 1-B11-B20-B18))
(1/3) 8 - BEV. FILL 8½x(15/32 TO 3 5/32 PIS)x9 - ff (2-B14, 1-B11-B17-B20)

¼ P WELD = 24-0
⅜ P WELD = 2440-0

SURFACES MARKED "C" TO BE COATED WITH A HOT MIXTURE OF WHITE LEAD & TALLOW.

RIVETS NONE
OPEN HOLES 15/16ϕ UNLESS NOTED
REAM NO
MILLING YES
PAINT ONE COAT AS PER SPECS EXCEPT "C" SURFACES & AS NOTED
WELDING YES
SHOP CONTACT SURFACES NO PAINT

SECT C-C FOR B19
SECT C-C & D-D FOR B13 & B16

SECT C-C FOR B17 & B18

SECT C-C & D-D FOR B11-B14-B15-B20-B21 & B12

SECT B-B FOR B13-B16 & B19

NO PAINT ONE COAT BOILED LINSEED OIL

SECT B-B FOR B12-B15-B18 & B21

NO PAINT ONE COAT BOILED LINSEED OIL.

SECT B-B FOR B11-B14-B17 & B20

SECT A-A & F-F FOR B13-B16 & B19

NO PAINT ONE COAT BOILED LINSEED OIL

SECT A-A & F-F FOR {B12 B15-B18 & B21}

NO PAINT ONE COAT BOILED LINSEED OIL

SECT A-A & F-F FOR {B11 B14-B17 & B20}

PAINT SECTION

CAMBER DIAGRAM

NOTES:
1. FOR GEN. NOTES & WELDING SPECS. SEE SHT E2
2. MAT'L ASTM A7 UNLESS NOTED

STRINGERS B11 TO B21

INTERSTATE #95
OVER MAINE CENTRAL R.R. & COUNTY ROAD 6(33) 133
WATERVILLE, MAINE

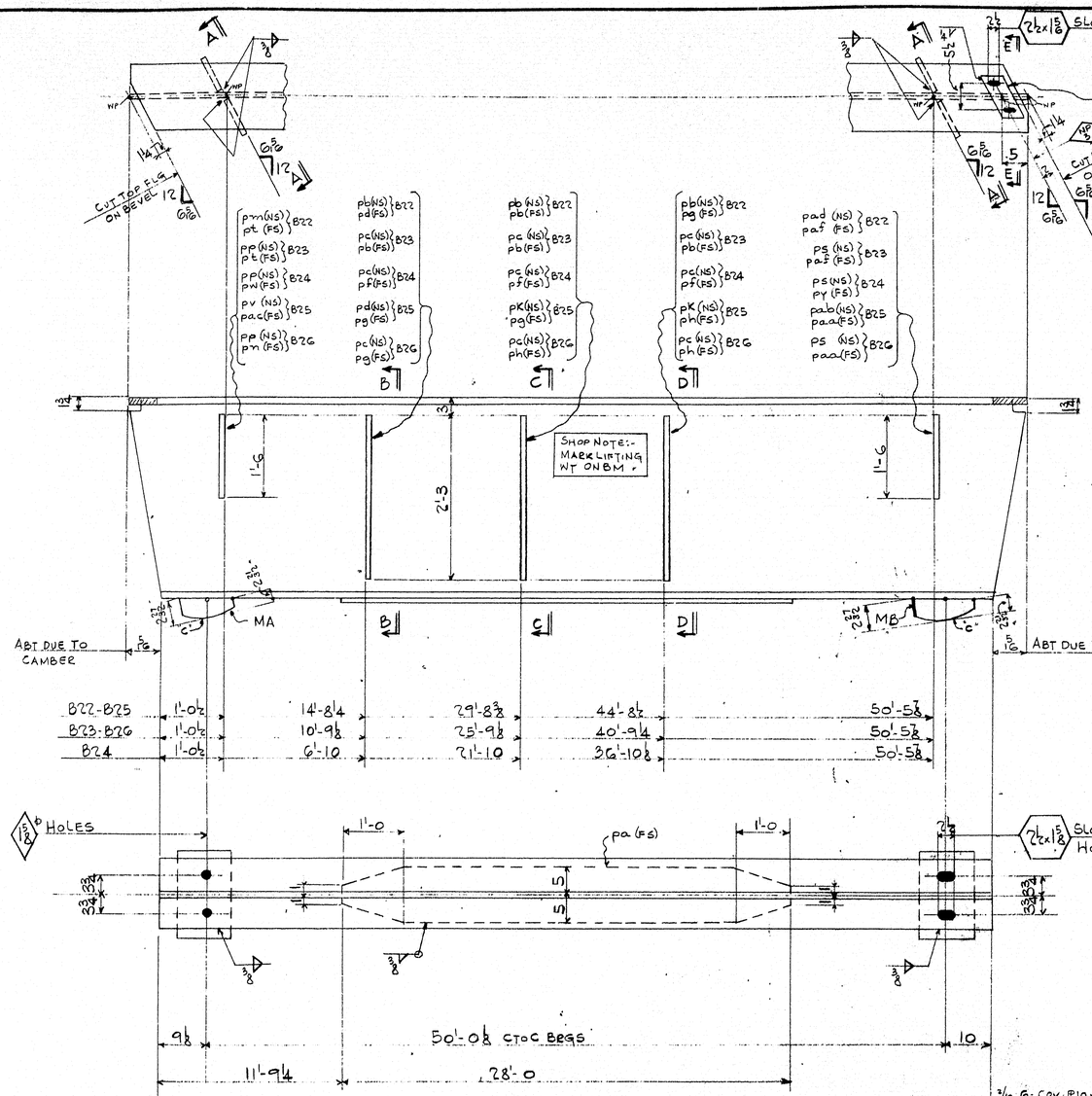
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM (HOUSE) BETH. WORKS
IN CHARGE NATHAN LEGGE MADE BY JT 12/16/58
CHECKED BY R 12-19-58 TRACED BY
REVISED LAST ASSEM. MK.

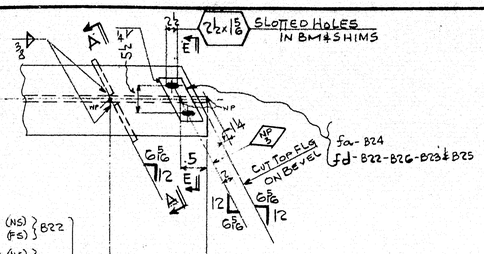
TEMP. / SUPT. / LAYOUT / FITTER / SHOP INSP. / PO. WK. / S. SMITH / MCH. / ERECT. / D. INSP. / WEIGHTS

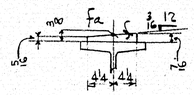
SHOP NO.
CONTRACT CP4434
SHEET 3

75-125 E

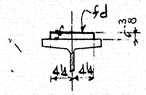
0 1 2 3 4 5 INCHES



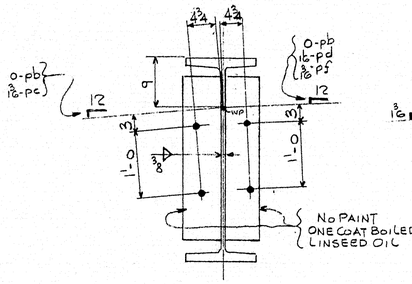




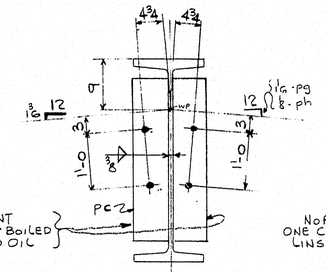
SECT. E-E FOR B24



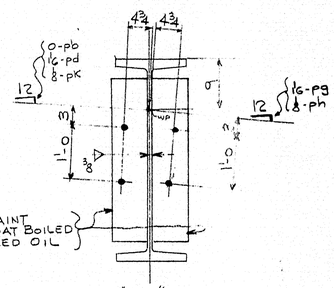
SECT. E-E FOR B22-B25-B26 & B23



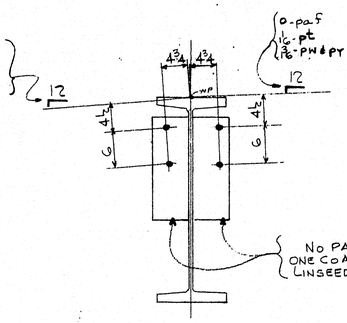
SECT. B-B & C-C FOR B22
SECT. B-B-C-C & D-D FOR B23 & B24



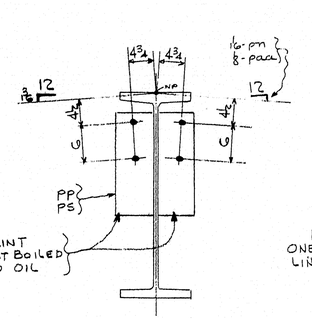
SECT. B-B-C-C & D-D FOR B26



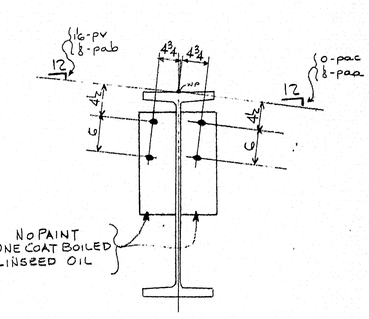
SECT. D-D FOR B22
SECT. B-B-C-C & D-D FOR B25



SECT. A-A FOR B22-B23 & B24



SECT. A-A FOR B26



SECT. A-A FOR B25

PAINT SECTION

CAMBER DIAGRAM

MARK	No REQ'D	SPAN
B22	ONE	1
B23	ONE	1
B24	2	145
B25	ONE	5
B26	ONE	5

B23⅛ x 130 x 51'-7¼ 3/12
x 51'-7¼ 3/12
x 51'-7¼ 3/12
B22⅛ x 130 x 51'-7¼ 3/12
} ASTM A373

SPECIAL QUALITY

2/B	6-Cov. PL 10 x ½ x 28'-0 - pa	(um) ASTM A373	
5/B	7- PL 6 x ½ x 2'-3 - pb	A-B22, B-B23	
	12- PL 6 x ½ x 2'-3 - pc	B23, B24, B26	
	2- PL 6 x ½ x 2'-3 - pd	B22, B25	
	6- PL 6 x ½ x 2'-3 - pf	B24	
	4- PL 6 x ½ x 2'-3 - pg	2-B25, 1-B22-26	
	3- PL 6 x ½ x 2'-3 - ph	2-B26, 1-B25	
	2- PL 6 x ½ x 2'-3 - pK	B25	
	1- PL 6 x ½ x 1'-6 - pm	B22	
	1- PL 6 x ½ x 1'-6 - pn	B26	
	4- PL 6 x ½ x 1'-6 - pp	B23, B24, B26	
	4- PL 6 x ½ x 1'-6 - ps	B23, B24, B26	
	2- PL 6 x ½ x 1'-6 - pt	B22-B23	
	1- PL 6 x ½ x 1'-6 - pv	B25	
	2- PL 6 x ½ x 1'-6 - pw	B24	
	2- PL 6 x ½ x 1'-6 - py	B24	
5/B	2- PL 6 x ½ x 1'-6 - paa	B25, B26	
5/B	1- PL 6 x ½ x 1'-6 - pab	B25	
5/B	1- PL 6 x ½ x 1'-6 - pac	B25	
5/B	1- PL 6 x ½ x 1'-6 - pad	B22	} SPECIAL QUALITY
5/B	2- PL 6 x ½ x 1'-6 - paf	B22-B23	
	RI		
	G- PL 10 x (2 23/32 TO 2 25/32 PIS) x 1'-2 - MA		} DETAILED ON SH #1
	G- PL 10 x (2 31/32 TO 2 33/32 PIS) x 1'-2 - MB		} DO NOT DUPLICATE

(1/8) 2-BEV FILL ⅜ x (2⅝ TO 2⅞ PIS) x 9'-5 - fa B24

(1/4) 4-FILL ⅜ x ⅜ x 9 - fd { B22 & B26 / B25 & B25
¼ D WELD x 3'-6"
⅜ D WELD, GO 5'-0

SURFACES MARKED "C" TO BE COATED WITH A HOT MIXTURE OF WHITE LEAD & TALLOW

RIVETS NONE
OPEN HOLES 15/16 UNLESS NOTED
REAM NO
MILLING YES
PAINT ONE COAT AS PER SPECS EXCEPT 2" SURFACES & AS NOTED
WELDING YES
SHOP CONTACT SURFACES NO PAINT

Notes
1- FOR GEN. NOTES & WELDING SPECS SEE SH #2
2- MAT'L ASTM A7 UNLESS NOTED

STRINGERS B22 TO B26

INTERSTATE #95 Proj
OVER MAINE CENTRAL R.R. & COUNTY ROAD 6(13)133
WATERVILLE, MAINE

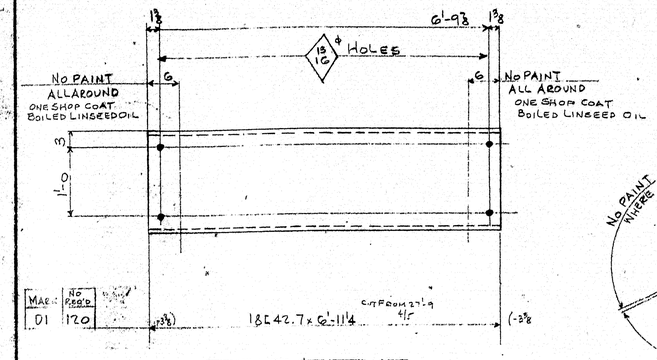
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM BETH. WORKS (HOOVER)
IN CHARGE NATH'AN ROSE MADE BY FT 12/16/58
CHECKED BY JC 12-20-58 TRACED BY
REVISED R1-JC 1/22/59 LAST ASSEM. MK.

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PO. WK.	
R. SMITH	
MCH.	
ERECT.	
O. INSP.	
WEIGHTS	

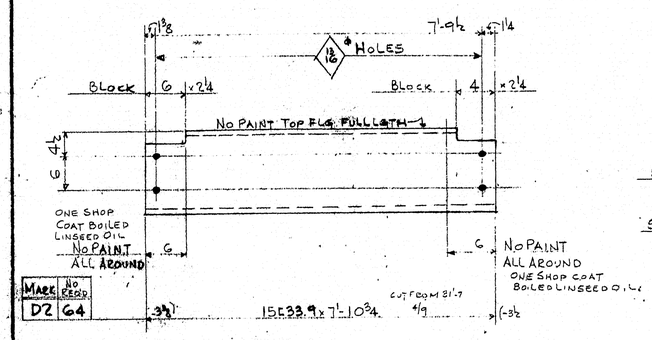
SHOP NO.
CONTRACT CP4434
SHEET 4

5200-In-3.58-BSCH

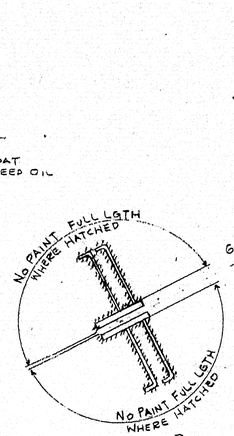
75-125 F

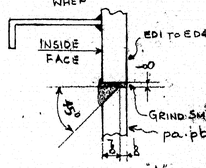


SPAN	1	2	3	4	5	6	7	8
No. REQ	12	16	16	16	12	16	16	16



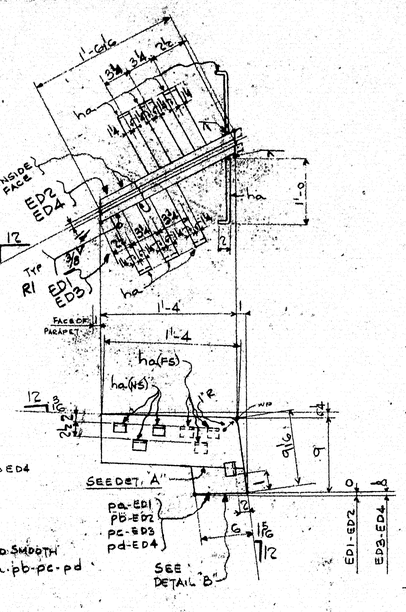
SPAN	1	2	3	4	5	6	7	8
No. REQ	8	8	8	8	8	8	8	8

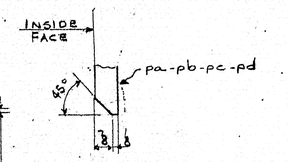




DETAIL "A"

WELDING OF 1" PS





DETAIL B

GRIND EDGE OF R pa-pb-pc-pd

SHIP TOGETHER
- ED1-R6x1x1'-7 1/2 ± (ONE REQ'D) 8/5
- ED2-R6x1x1'-7 1/2 ± (ONE REQ'D) 8/5

SHIP ONE OF EACH TOGETHER
- ED3-R6x1x1'-7 1/2 ± (11 REQ'D) 8/5
- ED4-R6x1x1'-7 1/2 ± (11 REQ'D) 8/5

	SPANS					
	1	2	3	5	6	7
1						
1	2	2	2	2	2	2

9 G-R3 1/2x3 1/2x1'-2 -ha BENT 9/6

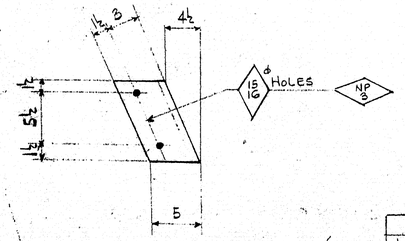
- 1-R3 1/2x1x6 -pa ED1
- 1-R3 1/2x1x6 -pb ED2
- 11-R3 1/2x1x6 -pc ED3
- 11-R3 1/2x1x6 -pd ED4

8/5

1/8 ▽ WELD x 13'-0

3/16 △ WELD x 4'-0

R1



	SPANS						
	1	2	3	5	6	7
60-SHIMS 8 1/2 x 4 x 9 1/2 - M1 1/16	10	10	10	10	10	10
120-SHIMS 8 1/2 x 8 x 9 1/2 - M2 1/8	20	20	20	20	20	20

DIAPHRAGMS & SIDEWALK DAMS

RIVETS NONE
OPEN HOLES AS NOTED
REAM NO
MILLING NO
PAINT ONE COAT AS PER SPECS UNLESS NOTED
WELDING YES
SHOP CONTACT SURFACES NO PAINT

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
O. INSP.	
WEIGHTS	

INTERSTATE #95

OVER MAINE CENTRAL R.R. & COUNTY ROAD PROJ. C(22)123

WATERVILLE MAINE

BETHLEHEM STEEL COMPANY

FABRICATED STEEL CONSTRUCTION

BETHLEHEM DRAFTING ROOM BETH. WORKS

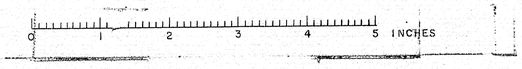
IN CHARGE NATHAN S. ROSS (HOOVER) MADE BY FT 12/16/58

CHECKED BY C 12-26-58 TRACED BY

REVISED R1-KH 12/22/59 LAST ASSEM. MK.

SHOP NO. CONTRACT CP1434 SHEET 5

75-125 C



TEMP. ANGLES @ 5'-0" CC (±)

CUT ON BEVEL

ED7 ED9 ED10

ED5 ED6 ED8

SLOTTED HOLES TYPICAL

GUTTER LINE

TYPICAL

SPLICE SEE DETAIL "A"

CROWN

WORKLINE

EDS-EDG-ED8

ED10 / ED7-ED9

35'-0

17'-6

8'-5⅝

5'-0⅛

4'-2⅜

3'-4⅛

3¼

9

2½

pK - ED5
pm - EDG
pn - ED7
pp - ED8
ps - ED9
pt - ED10

No PAINT TOP OF RS

HORIZONTAL

pa (TYP)

ha - ED5
hb EDG
hc - ED7
hd - ED8
hf . ED9
hg . ED10

4 SPA @ 1'-7¼ = 6'-5 (5-pa)

1'-8

2'-0

1'-0

ph - ED5
pb - EDG
pc - ED7
pd - ED8
pf - ED9
pg - ED10

pe - ED5
pd - EDG
pf - ED7
pg - ED8
ph - ED9
pK - ED10

No PAINT FULL LENGTH WHERE HATCHED

WP

SPLICE GRIND SMOOTH

WORK LINE

R10x1

L6x6x¾

PLAN

ELEV.

DETAIL "A"

SECT B-B

3 x 1⅜ SLOTTED HOLE IN ma

⅝ HOLE IN mb

¾ ø BOLT

TACK WELD

(SHOP NOTE:- TIE BOTTOM FOR SHIPT WHERE NECESSARY)

SECT A-A (TYP @ 5'-0 c/c)

TEMP. ANGLES FOR SHIPT AND ERECTION TO HOLD DAMS IN PROPER ALIGNMENT

PAINT SECT.

HOLES MARKED WP BOTH SIDES OF MATERIAL ADJACENT TO OPEN HOLES MUST BE FREE OF MILL SCALE, LOOSE SCALE AND PAINT FOR A DISTANCE OF 2 INCHES FROM THE EDGE OF HOLE

EXPANSION DAMS

32'-10½
27'-1⅞
STA. ABT. ℄ CROWN
PARABOLIC CURVE
STRAIGHT LINE
ED5 & ED10
GRIND TOP
EDG & ED7
ED8 & ED9
℄ HORIZ

OFFSETS FROM HORIZ. LINE FOR DAMS

SPANS	1	2	3	5	6	7
	1	1		1	1	
			1			
	1					

SHIP TOGETHER IN PAIRS — ED10 (4 REQ'D) / ED5 (4 REQ'D)

SHIP TOGETHER — EDG (ONE REQ'D) / ED7 (ONE REQ'D)

SHIP TOGETHER — ED8 (ONE REQ'D) / ED9 (ONE REQ'D)

1-R10x1x17'-4½" - pK	ED5	Cut from 35'-0 7/8
1-R10x1x17'-4⅜" - pm	EDG	
1-R10x1x17'-8⅜" - pn	ED7	
1-R10x1x17'-4⅜" - pp	ED8	
1-R10x1x17'-8⅜" - ps	ED9	
1-R10x1x17'-8⅜" - pt	ED10	
1-R10x1x17'-8⅜" - ph	ED5	
1-R10x1x17'-8⅜" - pb	EDG	
1-R10x1x17'-8⅜" - pc	ED7	
1-R10x1x17'-8⅜" - pd	ED8	
1-R10x1x17'-8⅜" - pf	ED9	
1-R10x1x17'-8⅜" - pg	ED10	

240 RIVS. ⅞ ø
42 - L6x3½x¾ - ma
42 - L6x3½x⅜ - mb
42 TO BE ¾ ø H.T.B.
TEMP. SHIPPING ℄

⅜ WELD ALL
⅝ WELD BOTH ℄ OF INTER-MEDIATE ⅝ ø
T R10-0
T 11-5

1-L6x6x¾x17'-7⅞" - ha	BENT	ED5
1-L6x6x¾x17'-7⅞" - hb		EDG
1-L6x6x¾x17'-7⅞" - hc		ED7
1-L6x6x¾x17'-7⅞" - hd		ED8
1-L6x6x¾x17'-7⅞" - hf		ED9
1-L6x6x¾x17'-7⅞" - hg	BENT	ED10
1-L6x6x¾x17'-7⅞" - mc		ED5
1-L6x6x¾x17'-7⅞" - md		EDG
1-L6x6x¾x17'-7⅞" - me		ED7
1-L6x6x¾x17'-7⅞" - mf		ED8
1-L6x6x¾x17'-7⅞" - mg		ED9
1-L6x6x¾x17'-7⅞" - mh		ED10
1-L6x6x¾x17'-7⅞" - mK		ED10

Cut from 35'-9 c/c

RIVETS NONE
OPEN HOLES AS NOTED
REAM NO
MILLING NO
PAINT ONE COAT AS PER SPECS UNLESS NOTED
WELDING TES
SHOP CONTACT SURFACES NO PAINT

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
S. SMITH	
MCH.	
ERECT.	
O. INSP.	
WEIGHTS	

INTERSTATE #95 — PROJ.
OVER MAINE CENTRAL R.R. & COUNTY ROAD 6/23/129
WATERVILLE, MAINE
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM BETH. WORKS (Hoover)
IN CHARGE NATHANIEL ROSS MADE BY JT 10/15/58
CHECKED BY K 10-22-58 TRACED BY
REVISED 11-20-58 11/21/58 LAST ASSEM. MK.
SHOP NO. CONTRACT CP4434 SHEET 6

75-125 H

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)123	1	24

STATE OF MAINE
STATE HIGHWAY COMMISSION

PLANS

WATERVILLE

KENNEBEC COUNTY

MAINE FEDERAL AID INTERSTATE #95

PROJECT NO. I-95-6(23)123 PART I

TOTAL LENGTH 0.050 MILES

SCALES
- PLAN — 1 IN. = 50 FT.
- PROFILE — HOR. 1 IN. = 50 FT.; VER. 1 IN. = 5 FT.
- CROSS SECTIONS — 1 IN. = 10 FT.

INTERSTATE *95 BRIDGE OVER MAINE CENTRAL R.R. AND COUNTY ROAD

INDEX OF SHEETS

1 _____ TITLE SHEET
2-3 ___ TYPICAL SECTIONS
4 _____ SPECIAL DETAILS
5 _____ GENERAL PLAN STA. 1036+00 to STA. 1052+00
6 _____ PROFILE STA. 1037+00 to STA. 1053+00
7-18 ___ BRIDGE SHEETS

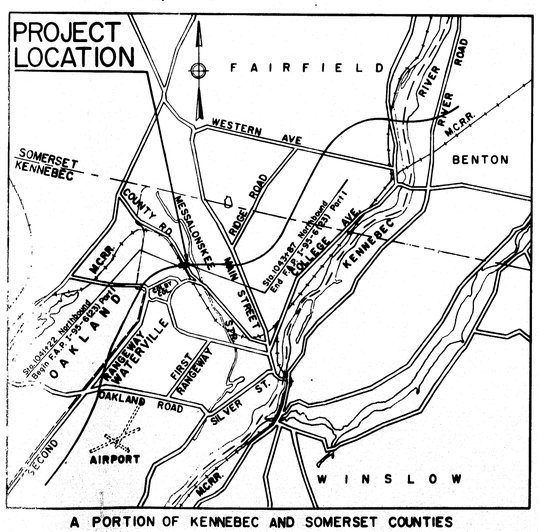
AS BUILT
1960

CONVENTIONAL SIGNS

STATE OR NATIONAL LINE		SURVEY LINE	
COUNTY LINE		CULVERT	
TOWN LINE		DROP INLET	
UNFENCED PROPERTY		TROLLEY POLE	
FENCE		POWER POLE	
RIGHT OF WAY LINE		TEL. POLE	
TRAVELED WAY		MARSH	
RAILROAD		TREES	
RETAINING WALL		STONE WALL	

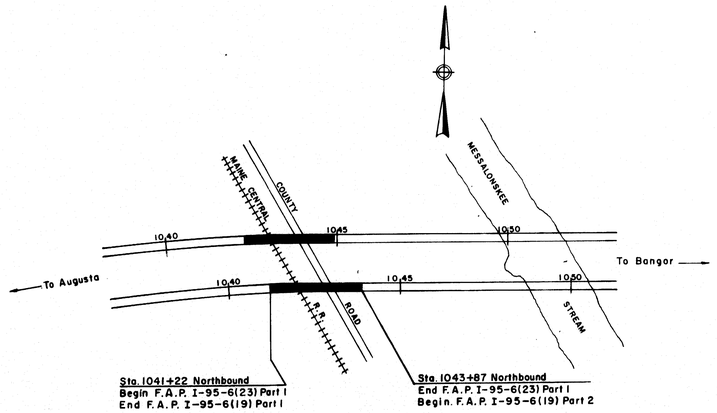
Interstate *95 shall be constructed to Top of Gravel Base only, within the Limits indicated on the Plans. Construction of Maine Central Railroad-County Road Bridge is included in this Contract.
Other Concurrent Contracts within the Limits of this Project are:
F.A.P. I-95-6(19) Part 1 and
F.A.P. I-95-6(19) Part 2.

All work contemplated under this Contract to be Governed by and in conformity with the Standard Specifications, Highways and Bridges, Revision of Jan. 1956, except as modified on these Plans And by the Special Provisions.



A PORTION OF KENNEBEC AND SOMERSET COUNTIES

APPROX. SCALE 1IN. = 1 MILE



LAYOUT PLAN

SCALE: 1" = 200'

A.D.T.(1960)	= 7050
A.D.T.(1980)	= 9620
D.H.V.(1980)	= 1443
D.(1980)	= 65%
T.(1980)	= 15%
V.(M.P.H.)	= 60

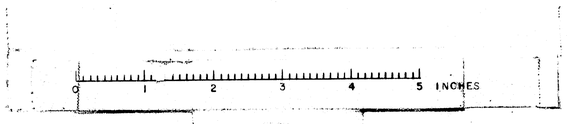
APPROVED:
MAINE CENTRAL RAILROAD CO.
_____ CHIEF ENGINEER.

APPROVED:
MAINE STATE HIGHWAY COMMISSION
_____ CHAIRMAN
_____
_____
_____ CHIEF ENGINEER

CONSULTING ENGINEERS
THE CLARKESON ENGINEERING COMPANY, INC.
BOSTON MASS.
_____ CONSULTING ENGINEER
9/26/58 DATE

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
REGION 1
APPROVED:
_____ DIVISION ENGINEER _____ DATE

75-101



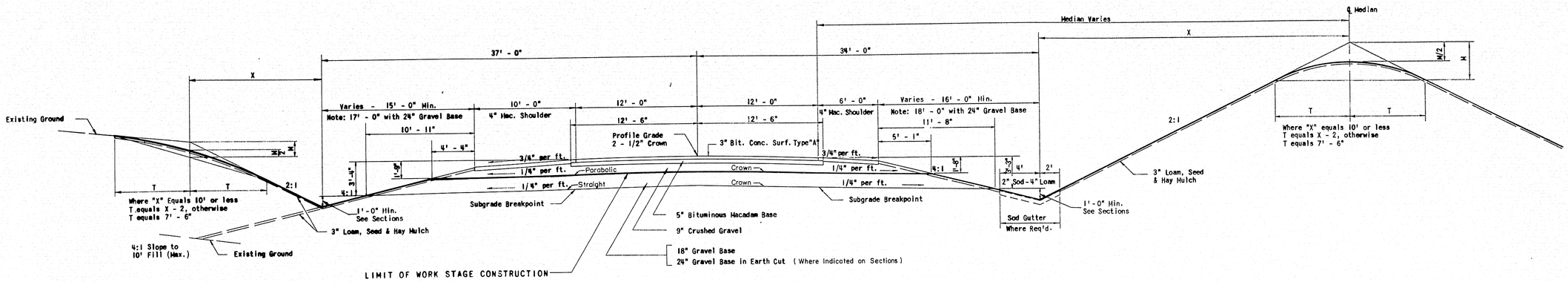
C. B. CO., NO. 370 17686

B. P. R. RES NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	2	78

WATERVILLE INTERSTATE

GRADING CONTRACT — STAGE CONSTRUCTION

INTERSTATE #95 TO BE CONSTRUCTED TO TOP OF GRAVEL BASE ONLY UNLESS OTHERWISE INDICATED



TYPICAL SECTION - NORMAL

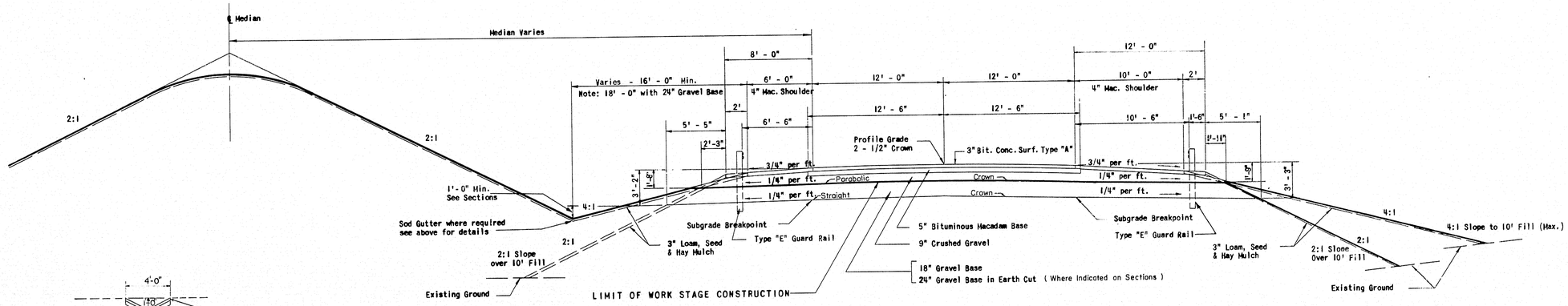
Scale: 1" = 5'

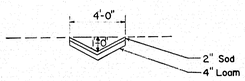
SOUTHBOUND INTERSTATE

10' PAVED SHOULDER	CY/100 L.F.
4" Bituminous Macadam Surface	12.19
Crushed Gravel Base (to 4:1 Slope)	36.33
18" Gravel Base (to 4:1 Slope)	91.92
24" Gravel Base (to 4:1 Slope)	130.64

24' PAVEMENT	CY/100 L.F.
3" Bituminous Concrete Surface	22.22
5" Bituminous Macadam Base (25' Wide)	38.58
9" Crushed Gravel Base	66.67
18" Gravel Base	136.42
24" Gravel Base	180.87

6' PAVED SHOULDER	CY/100 L.F.
4" Bituminous Macadam Surface	7.25
Crushed Gravel Base (to 4:1 Slope)	27.46
18" Gravel Base (to 4:1 Slope)	73.74
24" Gravel Base (to 4:1 Slope)	106.40





SODDED "V" DITCH

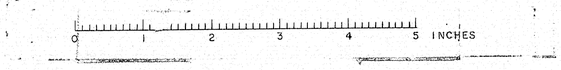
TYPICAL SECTION - NORMAL

Scale: 1" = 5'

NORTHBOUND INTERSTATE

8' PAVED SHOULDER	CY/100 L.F.
4" Bituminous Macadam Surface	9.72
Crushed Gravel Base (to 2:1 Slope)	29.23
18" Gravel Base (to 2:1 Slope)	62.80

12' PAVED SHOULDER	CY/100 L.F.
4" Bituminous Macadam Surface	14.66
Crushed Gravel Base (to 2:1 Slope)	38.14
18" Gravel Base (to 2:1 Slope)	83.09



MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

TYPICAL SECTIONS

THE CLARKESON ENGINEERING CO., INC.
CONSULTING ENGINEERS
BOSTON MASSACHUSETTS

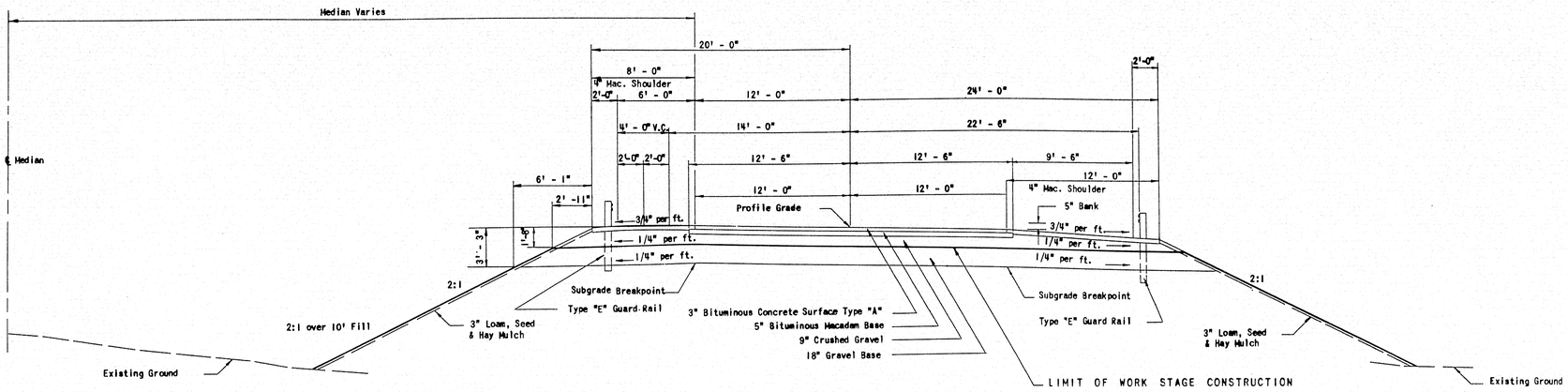
75-102

B. P. R. RE & NO.	STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I — 95 — 6(23)	3	78 24

WATERVILLE INTERSTATE

GRADING CONTRACT — STAGE CONSTRUCTION

INTERSTATE 95 TO BE CONSTRUCTED TO TOP OF GRAVEL BASE ONLY UNLESS OTHERWISE INDICATED



24" PAVEMENT	C.Y./100 L.F.
3" Bituminous Concrete Surface	22.22
5" Bituminous Macadam Base (25' Wide)	38.58
9" Crushed Gravel Base	66.67
18" Gravel Base	133.33
24" Gravel Base	177.78

8' PAVED SHOULDER	C.Y./100 L.F
4" Bituminous Macadam Surface	9.72
Crushed Gravel Base (to 2:1 Slope)	38.37
18" Gravel Base (to 2:1 Slope)	66.15

TYPICAL SECTION - SUPERELEVATED

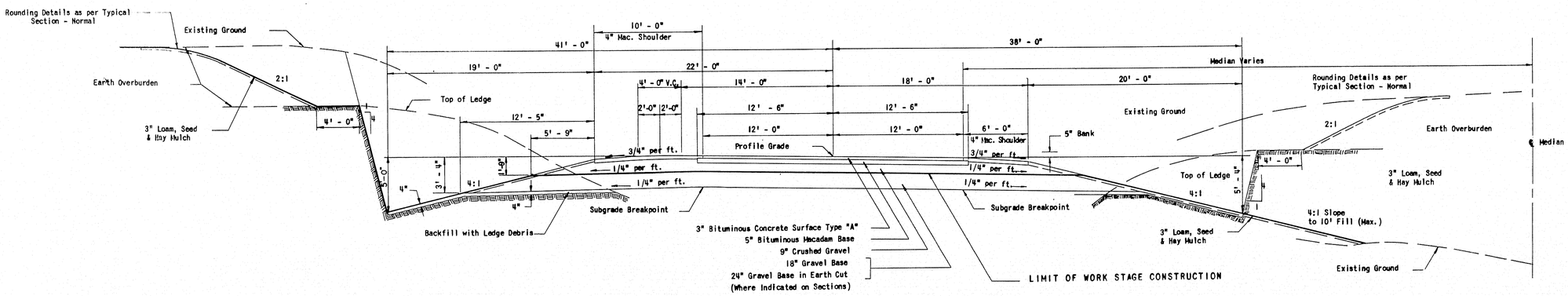
Showing B = 5" Superelevation for D = 0° - 30'

Scale: 1" = 5'

NORTHBOUND INTERSTATE

12' PAVED SHOULDER

For Quantities see Typical Section - Normal



10' PAVED SHOULDER	C.Y./100 L.F.
4" Bituminous Macadam Surface	12.19
Crushed Gravel Base (to 4:1 Slope)	49.67
18" Gravel Base (to 4:1 Slope)	99.67
24" Gravel Base (to 4:1 Slope)	141.00

TYPICAL SECTION - SUPERELEVATED

Showing B = 5" Superelevation for D = 0° - 30'

Scale: 1" = 5'

SOUTHBOUND INTERSTATE

6' PAVED SHOULDER

For Quantities see Typical Section - Normal

0 1 2 3 4 5 INCHES

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

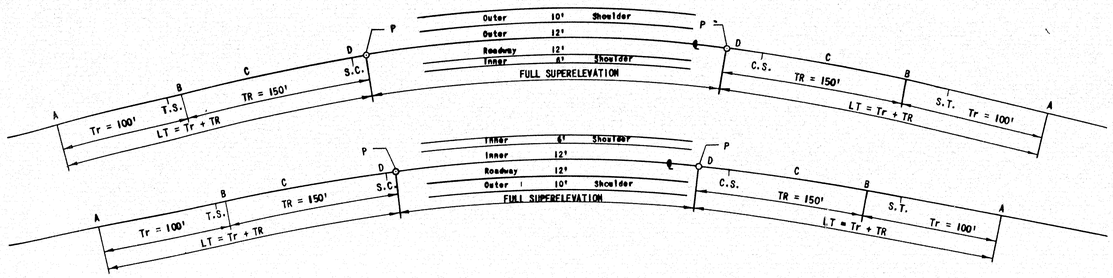
TYPICAL SECTIONS

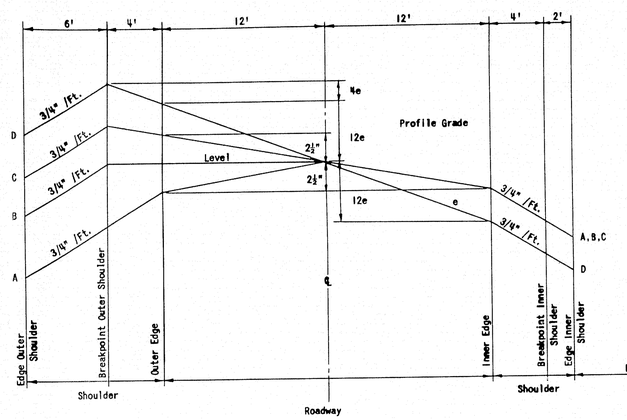
THE CLARKESON ENGINEERING CO.,INC.
CONSULTING ENGINEERS
BOSTON MASSACHUSETTS

75-103

B. P. R. DIV. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	4	424

WATERVILLE INTERSTATE

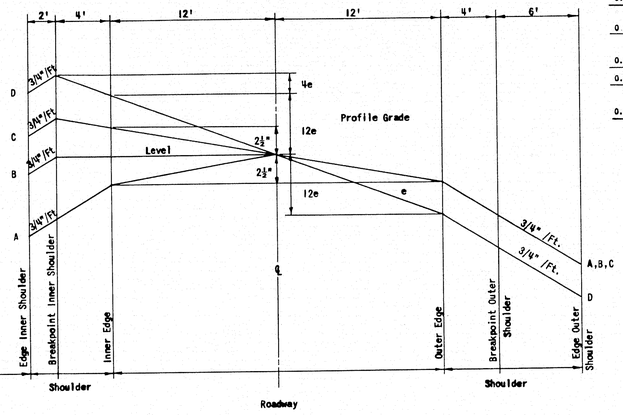




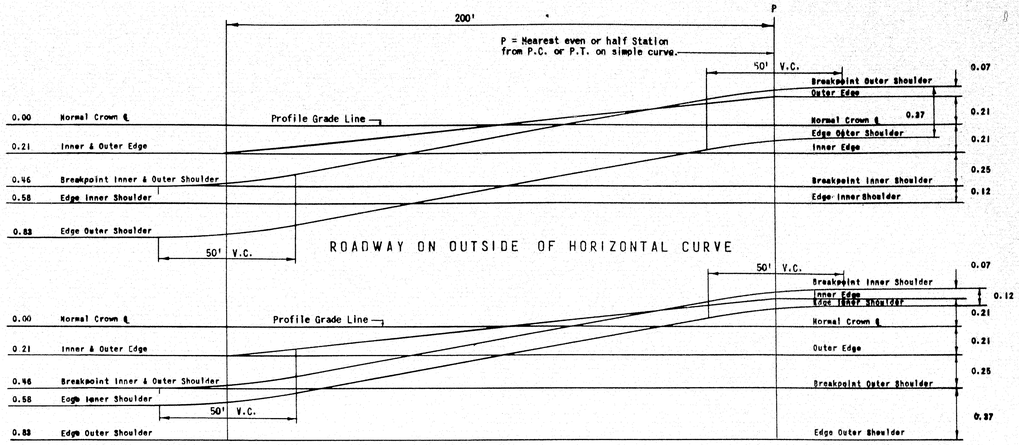
OUTER ROADWAY

BANKING DIAGRAM

1° - 30'



INNER ROADWAY



ROADWAY ON OUTSIDE OF HORIZONTAL CURVE

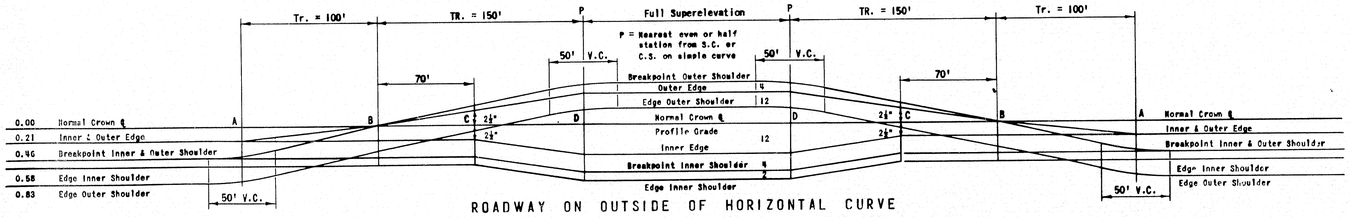
ROADWAY ON INSIDE OF HORIZONTAL CURVE

EDGE PROFILES D = 0°- 30'

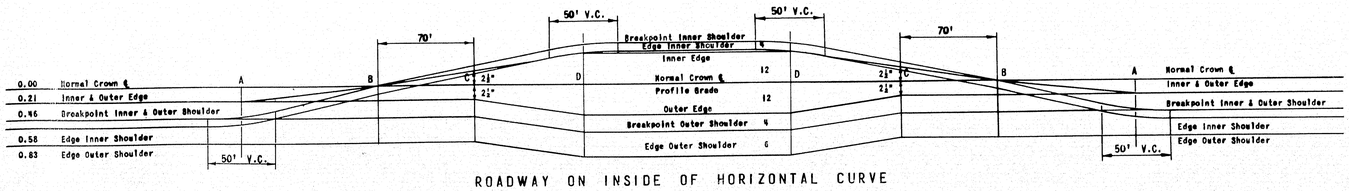
(SPIRALS NOT REQUIRED)

D = 0° - 30'

Distance From "P" Along ℄	OUTER ROADWAY							INNER ROADWAY						
	Edge Outer Shoulder	Breakpoint Outer Shoulder	Outer Edge	℄	Inner Edge	Breakpoint Inner Shoulder	Edge Inner Shoulder	Edge Inner Shoulder	Breakpoint Inner Shoulder	Inner Edge	℄	Outer Edge	Breakpoint Outer Shoulder	Edge Outer Shoulder
Full Sup.ele	-0.09	+0.28	+0.21	0.00	-0.21	-0.46	-0.58	+0.16	+0.28	+0.21	0.00	-0.21	-0.46	-0.83
P	-0.11	+0.26	+0.21	0.00	-0.21	-0.46	-0.58	+0.14	+0.26	+0.21	0.00	-0.21	-0.46	-0.83
50	-0.28	+0.09	+0.105	0.00	-0.21	-0.46	-0.58	-0.03	+0.09	+0.105	0.00	-0.21	-0.46	-0.83
100	-0.46	-0.09	0.00	0.00	-0.21	-0.46	-0.58	-0.21	-0.09	0.00	0.00	-0.21	-0.46	-0.83
150	-0.65	-0.28	-0.105	0.00	-0.21	-0.46	-0.58	-0.40	-0.28	-0.105	0.00	-0.21	-0.46	-0.83
200	-0.81	-0.44	-0.21	0.00	-0.21	-0.46	-0.58	-0.56	-0.44	-0.21	0.00	-0.21	-0.46	-0.83
Normal	-0.83	-0.46	-0.21	0.00	-0.21	-0.46	-0.58	-0.58	-0.46	-0.21	0.00	-0.21	-0.46	-0.83



ROADWAY ON OUTSIDE OF HORIZONTAL CURVE



ROADWAY ON INSIDE OF HORIZONTAL CURVE

D = 1° - 30'

Distance From "P" Along ℄	OUTER ROADWAY							INNER ROADWAY						
	Edge Outer Shoulder	Breakpoint Outer Shoulder	Outer Edge	℄	Inner Edge	Breakpoint Inner Shoulder	Edge Inner Shoulder	Edge Inner Shoulder	Breakpoint Inner Shoulder	Inner Edge	℄	Outer Edge	Breakpoint Outer Shoulder	Edge Outer Shoulder
Full Sup.ele	+ 0.23	+ 0.60	+ 0.45	0.00	- 0.45	- 0.70	- 0.83	+ 0.48	+ 0.60	+ 0.45	0.00	- 0.45	- 0.70	- 1.07
P	+ 0.21	+ 0.58	+ 0.45	0.00	- 0.45	- 0.70	- 0.83	+ 0.46	+ 0.58	+ 0.45	0.00	- 0.45	- 0.70	- 1.07
50	+ 0.03	+ 0.40	+ 0.30	0.00	- 0.30	- 0.55	- 0.67	+ 0.28	+ 0.40	+ 0.30	0.00	- 0.30	- 0.55	- 0.92
100	- 0.17	+ 0.20	+ 0.15	0.00	- 0.21	- 0.46	- 0.58	+ 0.08	+ 0.20	+ 0.15	0.00	- 0.21	- 0.46	- 0.83
150	- 0.37	0.00	0.00	0.00	- 0.21	- 0.46	- 0.58	- 0.12	0.00	0.00	0.00	- 0.21	- 0.46	- 0.83
200	- 0.60	- 0.23	- 0.105	0.00	- 0.21	- 0.46	- 0.58	- 0.35	- 0.23	- 0.105	0.00	- 0.21	- 0.46	- 0.83
250	- 0.80	- 0.43	- 0.21	0.00	- 0.21	- 0.46	- 0.58	- 0.55	- 0.43	- 0.21	0.00	- 0.21	- 0.46	- 0.83
Normal	- 0.83	- 0.46	- 0.21	0.00	- 0.21	- 0.46	- 0.58	- 0.58	- 0.46	- 0.21	0.00	- 0.21	- 0.46	- 0.83

SUPERELEVATION CHART

P = Point of Full Superelevation, nearest even or half station on Simple Curve, unless otherwise noted,
e = Rate of Superelevation (foot per foot).
Tr = Tangent Runout (100 feet).
TR = Transition Runoff (Varies).
LT = Total Length of Transition (Tr + T).

NOTES:

1. All distances are in feet and are added (+) to or subtracted (-) from Profile Elevation.
2. Fifty (50) foot Vertical Curves, shown, are to be used when grade changes are more than 0.30%.

THE CLARKESON ENGINEERING CO., INC.
CONSULTING ENGINEERS
BOSTON MASSACHUSETTS

MAINE STATE HIGHWAY COMMISSION
AUGUSTA MAINE

SPECIAL DETAILS

SUPERELEVATION DATA

75-105

0 1 2 3 4 5 INCHES

B. P. R. REG NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)	5	24

WATERVILLE INTERSTATE

Construction ℄
Southbound
P. I. Sta. 1022 + 87.08
Δ = 66°-31'-16"
Δc = 63°-31'-16"
Dc = 1°-30'-00"
Lc = 4234.74'
Tc = 2364.69'
Rc = 3819.72'
Es = 748.83'
Δs = 1°-30'-00"
Ls = 200.00'
Xs = 199.99'
Ys = 1.74'
Ts = 2605.61'
Full Superelevation
Sta. 999+00 to Sta. 1041+50

Construction ℄
Northbound
P. I. Sta. 1021 + 28.93
Δ = 66°-52'-09"
Δc = 63°-52'-09"
Dc = 1°-30'-00"
Lc = 4257.94'
Tc = 2380.77'
Rc = 3819.72'
Es = 757.97'
Δs = 1°-30'-00"
Ls = 200.00'
Xs = 199.99'
Ys = 1.74'
Ts = 2622.24'
Full Superelevation
Sta. 997+50 to Sta. 1039+50

SEE SHEET 22

MAINE

Western Union Telegraph Co.

W.U.T. # 83/10

COUNTY ROAD

CENTRAL R.R.

MESSALONSKEE STREAM

COLBY COLLEGE

JOHN H. STETSON

STA. 1045+50 SOUTHBOUND LIMIT OF WORK

STA. 1041+50 SOUTHBOUND LIMIT OF WORK

STA. 1042+75 SOUTHBOUND LIMIT OF WORK (By Others)

STA. 1044+20 SOUTHBOUND LIMIT OF WORK (By Others)

STA. 1050+50 SOUTHBOUND LIMIT OF WORK (By Others)

1040+50 to 1041+50 100'x2' Ditch Sodded (By Others)

C.S. 1041+16.22

S.T. 1043+16.22

20'-Sodded 'V' Ditch

Grade to Drain (By Others)

~~Hand-Laid Riprap 1-6 in Depth~~, Under 4 Bridge Downspouts.

SOUTHBOUND INTERSTATE #95

NORTHBOUND INTERSTATE #95

N 88°-28'-52"E 3418.65'

N 88°-02-01"E. 3627.52'

Approx. Location of Temporary Railroad Grade Crossing

66.2° RCP DITCH

Line of Improvement

Woods-Small Mixed Growth

STA. 1041+22 NORTHBOUND END F.A.P. I-95-6(19) PART 1 (By Others)

1039+30 to 1042+05 Rt.

280'x2' Ditch of Hand-Laid Riprap Min. Depth 1' (By Others)

C.S. 1039+64.64

S.T. 1041+64.64

STA. 1043+87 NORTHBOUND BEGIN F.A.P. I-95-6(19) PART 2 (By Others)

STA. 1043+10 NORTHBOUND LIMIT OF WORK (By Others)

STA. 1049+50 NORTHBOUND LIMIT OF WORK (By Others)

STA. 1047+56 NORTHBOUND END F.A.P. I-95-6(19) PART 2 (By Others)

STA. 1041+70 NORTHBOUND LIMIT OF WORK (By Others)

Woods

STA. 1041+22 NORTHBOUND BEGIN F.A.P. I-95-6(23) PART 1

STA. 1043+87 NORTHBOUND END F.A.P. I-95-6(23) PART 1

Temporary relocation of wire service buried cable during construction of Project I-95-6(19) and I-95-6(23) Part 1

STA. 1040+50 NORTHBOUND LIMIT OF WORK

STA. 1044+50 NORTHBOUND LIMIT OF WORK

12" C.M.P.

Pipe

Line of Improvement

R/W

150'

100'

FOR REVISED LIMITS OF WORK SEE CHANGE ORDER No. 2

Photogrammetric Map by LOCKWOOD, KESSLER & BARTLETT, INC. Syosset, New York
Date of Photography 11-11-57

0 1 2 3 4 5 INCHES

75-106

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I - 95 - 6 (23)	6	214

WATERVILLE INTERSTATE

FOR REVISED LIMITS OF WORK SEE CHANGE ORDER NO. 2

STA 1042+75 SOUTHBOUND
LIMIT OF WORK
(By Others)

STA 1043+10 NORTHBOUND
LIMIT OF WORK (By Others)

STA. 1043+87 NORTHBOUND
BEGIN F.A.P. I-95-6(19) PART 2 (By Others)

STA. 1044+20 SOUTHBOUND
LIMIT OF WORK (By Others)

STA. 1047+56 NORTHBOUND
END F.A.P. I-95-6(19) PART 2
(By Others)

STA. 1050+50 SOUTHBOUND
LIMIT OF WORK
(By Others)

STA. 1049+50 NORTHBOUND
LIMIT OF WORK
(By Others)

STA 1041+70 NORTHBOUND
LIMIT OF WORK
(By Others)

STA. 1041+22 NORTHBOUND
END F.A.P. I-95-6(19) PART 1
(By Others)

Sta. 1040+50 Northbound
Limit of Work

Sta. 1044+50 Northbound
Limit of Work

Sta. 1041+22 Northbound
Begin F.A.P. I-95-6(23) Part 1

Sta. 1043+87 Northbound
End F.A.P. I-95-6(23) Part 1

Sta. 1041+50 Southbound
Limit of Work

Sta. 1045+50 Southbound
Limit of Work

Existing Ground Southbound
Existing Ground Northbound

Construct to Top of 18" Gravel Base only.

Finished Grade Southbound
Finished Grade Northbound

-2.16%

-2.09%

-2.09%

V.C. = 1200'

V.C. = 1200'

Southbound H.L.S.D. = 850± d = 8.38' C = 42"

Northbound H.L.S.D. = 950± d = 7.74' C = 46"

Construct to Top of 18" Gravel Base only. Northbound (By Others)

Construct to Top of 24" Gravel Base only. Southbound (By Others)

Construct to Top of 18" Gravel Base only. (By Others)

P.V.I. Sta. 1051+25
151.27
Northbound

P.V.I. Sta. 1052+50
152.69
Southbound

Southbound 24"–18" Gravel Base (By Others)

Messalonskee Stream

		1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053
South-bound	Existing Grade	190.0	189.3	182.7	178.8	174.0	162.0	146.0	146.0	130.0	130.0	128.3	123.3	116.9	93.0	90.7	95.0	100.7
	Finished Grade	185.09	183.00	180.91	178.82	176.73	174.64	172.55	170.46	168.37	166.28	164.24	162.62	161.46	160.54	160.79	161.49	
North-bound	Existing Grade	191.4	185.0	178.6	165.0	153.0	144.0	140.0	131.1	127.0	109.2	104.2	107.9	85.6	92.2	95.5	106.0	119.9
	Finished Grade	182.05	179.89	177.73	175.57	173.41	171.25	169.09	166.93	164.77	162.73	161.11	159.92	159.15	158.82	158.96	159.45	160.40

INTERSTATE #95 (WATERVILLE INTERSTATE)

0 1 2 3 4 5 INCHES

75-107

75-143

B. P. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.
J.	MAINE	2-98-8(124)	23

NO.	BY	DATE

ORIGINAL SURVEY	SURVEYED	R.E. Butler 4-1947
	PLOTTED	L.J.P. 5-7-47
NOTE BOOK	TEMPLATE	
	AREAS	
	AREAS CHECKED	

FINAL SURVEY	SURVEYED	
	PLOTTED	
NOTE BOOK	TEMPLATE	
	AREAS	
	AREAS CHECKED	

PLATE 3 - CROSS SECTION. O. P. R. & E. STANDARD
HOUSEL & KIESER CO., NEW YORK.

5 INCHES.

SH. 18A OF 44

FINAL SURVEY		BY	DATE
NOTE BOOK NO. 24-1	SURVEYED	K.C. W.	1-11-60
	PLOTTED	C.A. W.	1-11-60
	TEMPLATE	J.S.H.	2-2-60
	AREAS	J.S.H.	2-2-60
	AREAS CHECKED	[illegible]	2-2-60

ORIGINAL SURVEY		BY	DATE
NOTE BOOK NO. 24-1	SURVEYED	[illegible]	6-3-33
	PLOTTED	[illegible]	6-3-33
	TEMPLATE	[illegible]	6-15-33
	AREAS		
	AREAS CHECKED		

E=0977

E=0978

4456

2+10

MAIN SHEET

1250

1250

BRUNING NO. 605 23031

PLATE 3—CROSS SECTION O. P. R. & R. E.
MADE AND PRINTED IN U. S. A.
CHARLES BRUNING COMPANY, INC.

75-144

0 1 2 3 4 5 INCHES

SH 18B OF 44

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED	WHC	2-20-59
NOTE BOOK	WHC	2-20-59
NO. 84-1	JMH	3-2-59
AREAS CHECKED	C.A.H.	3-2-59

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED	W.H.C.	11-24-58
TEMPLATE	JMH	11-24-58
NOTE BOOK	WHC	11-24-58
AREAS	C.A.H.	11-24-58
AREAS CHECKED		
NO.		

75-145

PLATE 3—CROSS SECTION O. P. R. & R. E.

MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY, INC.

BRUNING NO. 605 33931

0 1 2 3 4 5 INCHES

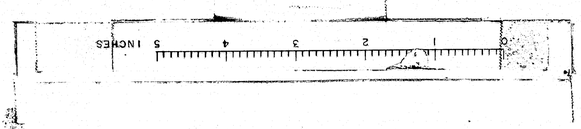


PLATE 3—CROSS SECTION O. F. N. A. R. E.
MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY, INC.

BRUNING NO. 005 53031

75-151

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED	WAC	8/1/57
	TEMPLATE	CAV	8/1/57
	AREAS		
	AREAS CHECKED		
NO.			

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

SN.21A OF44

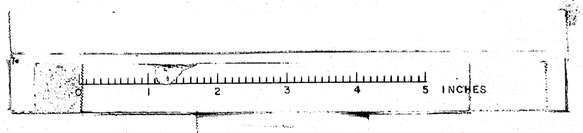
SH 21C OF 44

FINAL SURVEY		BY	DATE
NOTE BOOK NO.	SURVEYED		
	PLOTTED		
	TRACED		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK NO.	SURVEYED	WLC	8-22-75
	PLOTTED	CWL	10-16-75
	TRACED		
	AREAS		
	AREAS CHECKED		

STA. 1000+00 LENGTH OF WORK

75-153



SH 21D OF ##

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
NOTE BOOK		
NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
NOTE BOOK		
NO.	AREAS CHECKED	

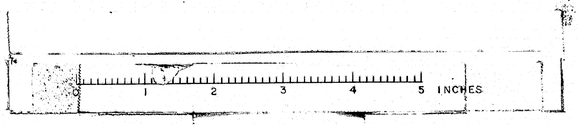


PLATE 3—CROSS SECTION O. P. R. & R. E.

MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY, INC.
BRUNING NO. 805 23031

75-154

SH. 23A OF 44

FINAL SURVEY	BY	DATE
SURVEYED	VSC	1-23-80
PLOTTED	VSC	2-11-80
NOTE BOOK		
TEMPLATE	DDB	2-11-80
AREAS	F.T.M.	2-11-80
NO. 24-1	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED	V.S.C.	10-23-56
PLOTTED	V.S.C.	11-16-56
TEMPLATE		
NOTE BOOK		
NO. 24	AREAS CHECKED	

STA 82+00 LIMIT OF WORK

STA 82+00 LIMIT OF WORK

PLATE 3—CROSS SECTION O. P. R. & R. E.
MADE AND PRINTED IN U. S. A.
CHARLES BRUNING COMPANY, INC.

BRUNING NO. 605 22821

75-156

0 1 2 3 4 5 INCHES

SH. 24A OF 44

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED	1966	12-66
NO. 24-1	PLOTTED	JHB	3-1-67
	TEMPLATE		
	AREAS	1967	3-1-67
	AREAS CHECKED	JHB/AL	3-21-67

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED	W.C.	11-26-58
NO. 22-1	PLOTTED	C.C.W.	11-26-58
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

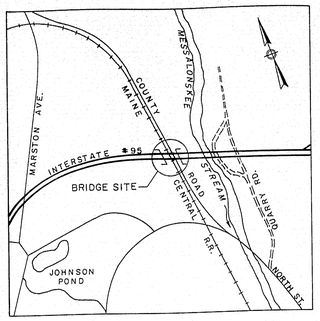
EUREKA NO. 600 2207

PLATE 3—CROSS SECTION o. P. R. & R. E.
MADE AND PRINTED IN U. S. A.
CHARLES BRUNING COMPANY, INC.

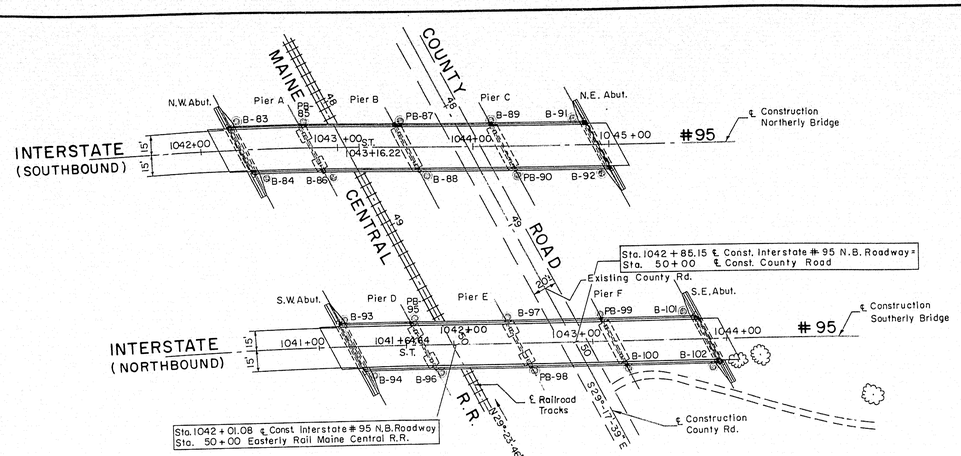
75-158

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	7	12

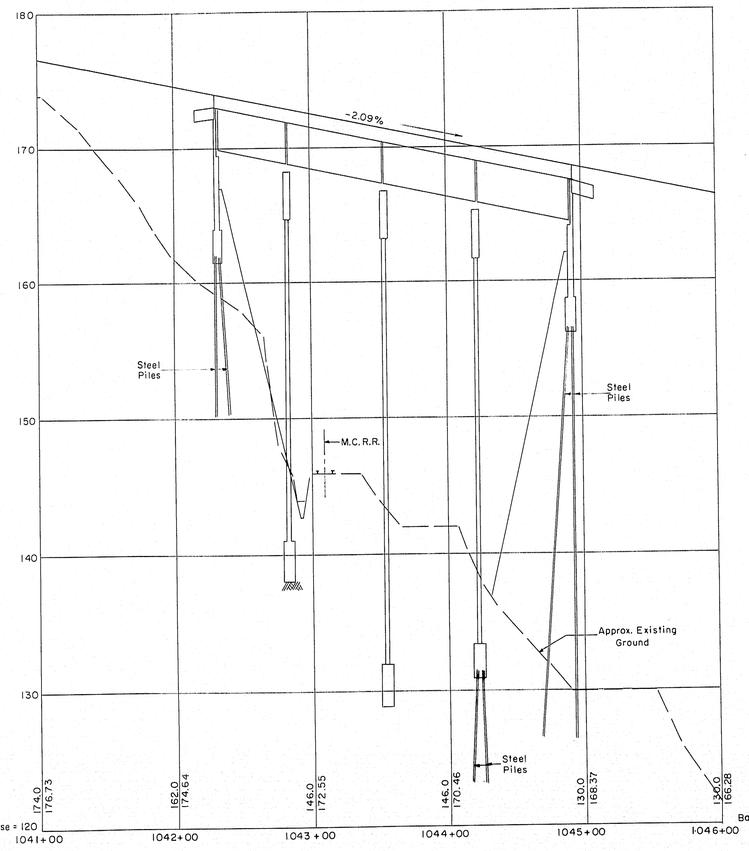
WATERVILLE INTERSTATE



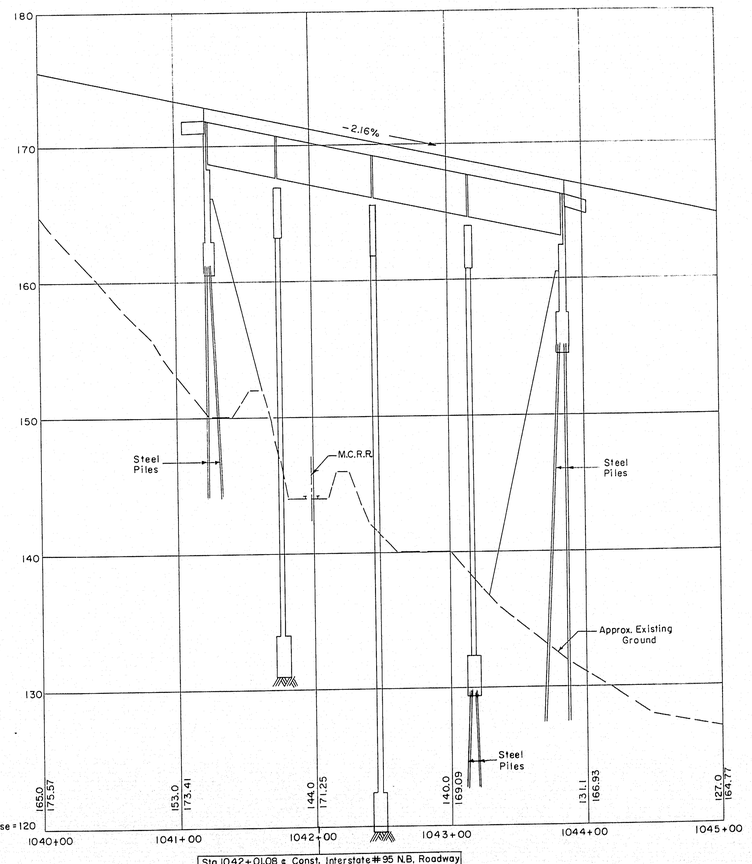
LOCATION MAP
Not to Scale



KEY PLAN
Scale: 1"=50'-0"



PROFILE ALONG INTERSTATE #95 (NORTHERLY BRIDGE)
Scale: Hor. 1"=50'
Vert. 1"= 5'



Sta. 1042+01.08 ℄ Const. Interstate #95 N.B. Roadway
Sta. 50+00 Easterly Rail Maine Central R.R.

PROFILE ALONG INTERSTATE #95 (SOUTHERLY BRIDGE)
Scale: Hor. 1"=50'
Vert. 1"= 5'

GENERAL NOTES

FOUNDATION:
Foundations may be altered, if necessary, to suit conditions encountered in construction.

DESIGN:
In accordance with the Specifications of the American Association of State Highway Officials for H20-S16-44 loading (1957 Edition) modified for military requirements.

Design Stresses: Structural Steel f_s = 18,000 p.s.i.
Reinforcing Steel f_s = 18,000 p.s.i.
Concrete (n=10) f_c = 1,200 p.s.i.

CONSTRUCTION:
State of Maine Standard Specifications to be followed except as noted in Special Provisions.

REINFORCEMENT:
All bars shall have deformations conforming to A.S.T.M. Designation A 305.
Unless otherwise shown on plans, reinforcing bars shall be lapped 20 diameters to make a splice, except that main reinforcing bars near the top of slabs and beams having more than 12" of concrete under the bars shall be lapped 35 diameters to make a splice.

STRUCTURAL STEEL:
Wherever cover plates and / or shear connectors are welded to beams, beams and plates shall be weldable structural steel A.S.T.M. Designation A 373.

BENCH MARK:
BM-46A Top of east rail opposite tel. pole with spike and shiner facing B.M.
Sta. 1042 + 10 (S.B.) 170' Lt.
Elevation 146.63 U.S.G.S. Datum

ESTIMATED QUANTITIES
(NOT GUARANTEED)

STRUCTURAL EARTH EXCAVATION, ABUTMENTS AND RETAINING WALLS	750	CU.YDS.
STRUCTURAL EARTH EXCAVATION, PIERS	890	CU.YDS.
STRUCTURAL ROCK EXCAVATION, PIERS	20	CU.YDS.
GRAVEL BASE COURSE-IN PLACE MEASUREMENT	1460	CU.YDS.
PORTLAND CEMENT CONCRETE, ABUTMENTS AND RETAINING WALLS	320	CU.YDS.
PORTLAND CEMENT CONCRETE, PIERS	420	CU.YDS.
PORTLAND CEMENT CONCRETE, ROADWAY & SIDEWALK SLABS ON STEEL BRIDGES	660	CU.YDS.
PORTLAND CEMENT	2100	BBLS.
BRIDGE DRAINAGE	1	LUMP SUM
STRUCTURAL STEEL, FABRICATED & DELIVERED	626,000	LBS.
STRUCTURAL STEEL, ERECTION	626,000	LBS.
REINFORCING STEEL, DELIVERED	263,200	LBS.
REINFORCING STEEL, PLACING	263,200	LBS.
SHEAR CONNECTORS, DELIVERED & PLACED	1	LUMP SUM
STEEL H-BEAM PILES 42 LBS/FOOT	4,480	LIN.FT.
FRENCH DRAINS	150	CU.YDS.
ALUMINUM RAILING	1050	LIN.FT.
SLOPE PAVING FOR BRIDGES	1520	SQ.YDS.
STRUCTURAL EARTH EXCAVATION - DRAINAGE	20	CU.YDS.
COMMON BORROW	1100	CU.YDS.
OVERHAUL (IN PLACE MEASURE)	3650	CU.YDS.
STRIPPING PITS	140	CU.YDS.
HAND LAID RIPRAP	80	CU.YDS.
LOAM BORROW	180	CU.YDS.
SODDING	40	SQ.YDS.
SEEDING - PARKWAY MIXTURE	19	UNIT
HAY MULCH	2	TON
PROJECT MARKERS	4	EACH

NOTE: 3-Ply Membrane Waterproofing and Bituminous Concrete Surfacing not in this contract.

DESIGN	CHECK H.P	BRIDGE NO
DRAWN V.S.	APPROVED W.A.H-C.J.M	SURVEY PLOT

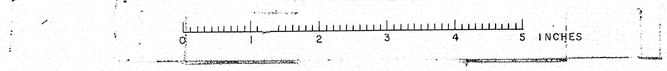
STATE HIGHWAY COMMISSION
INTERSTATE #95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
KEY PLAN & PROFILES

APPROVED BY _____ DATE _____

THE CLARKESON ENGINEERING CO., INC.
CONSULTING ENGINEERS
BOSTON MASSACHUSETTS

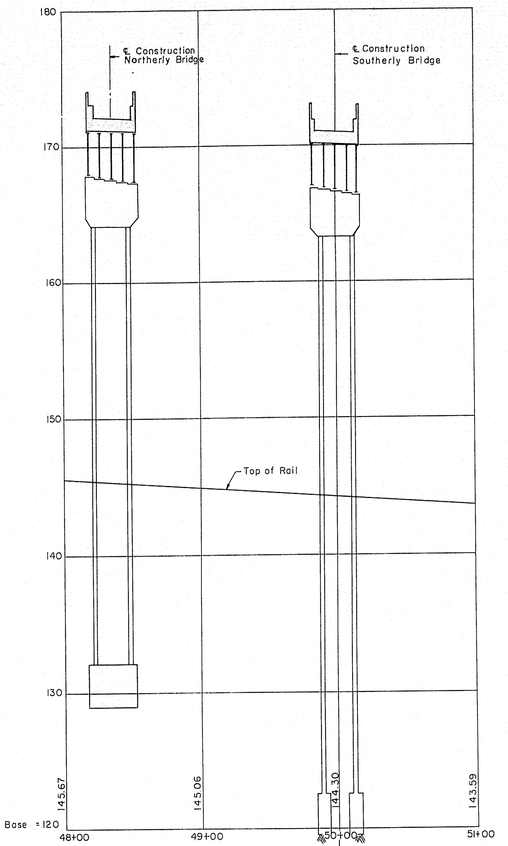
SHEET 1 OF 12 SHEETS AUGUSTA, MAINE

75-108



B. P. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	8	12

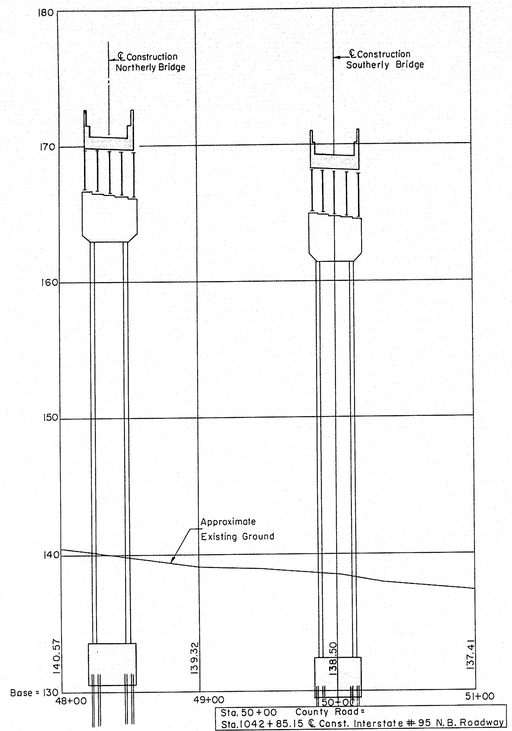
WATERVILLE INTERSTATE



Sta. 50+00 Easterly Rail Maine Central R.R.=
Sta.1042+01.08 ℄ Const. Interstate #95 N.B. Roadway

PROFILE ALONG MAINE CENTRAL R.R.
(EASTERLY RAIL)

Scales: Hor. 1" = 50'-0"
Vert. 1" = 5'-0"



Sta. 50+00 County Road =
Sta.1042+85.15 ℄ Const. Interstate #95 N.B. Roadway

PROFILE ALONG COUNTY ROAD

Scales: Hor. 1" = 50'-0"
Vert. 1" = 5'-0"

BANK DATA

Northerly Bridge	Southerly Bridge	Roadway slope in feet/foot * Left	Right
1042 + 00	1040 + 50	+.0125	-.0175
1042 + 50	1041 + 00	0	-.0175
1043 + 00	1041 + 50	-.00875	-.0175
1043 + 50	1042 + 00	-.0175	-.0175

* + slope is up from P.G.
- slope is down from P.G.

THE CLARKESON ENGINEERING CO., INC.

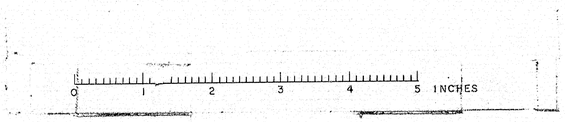
DESIGN	CHECK H.P.	BRIDGE NO.
DRAWN V.S.	APPROVED W.A.H.-C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MAINE CENTRAL R.R. & COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
PROFILES

SHEET 2 OF 12 SHEETS AUGUSTA, MAINE

75-109



B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	9	12

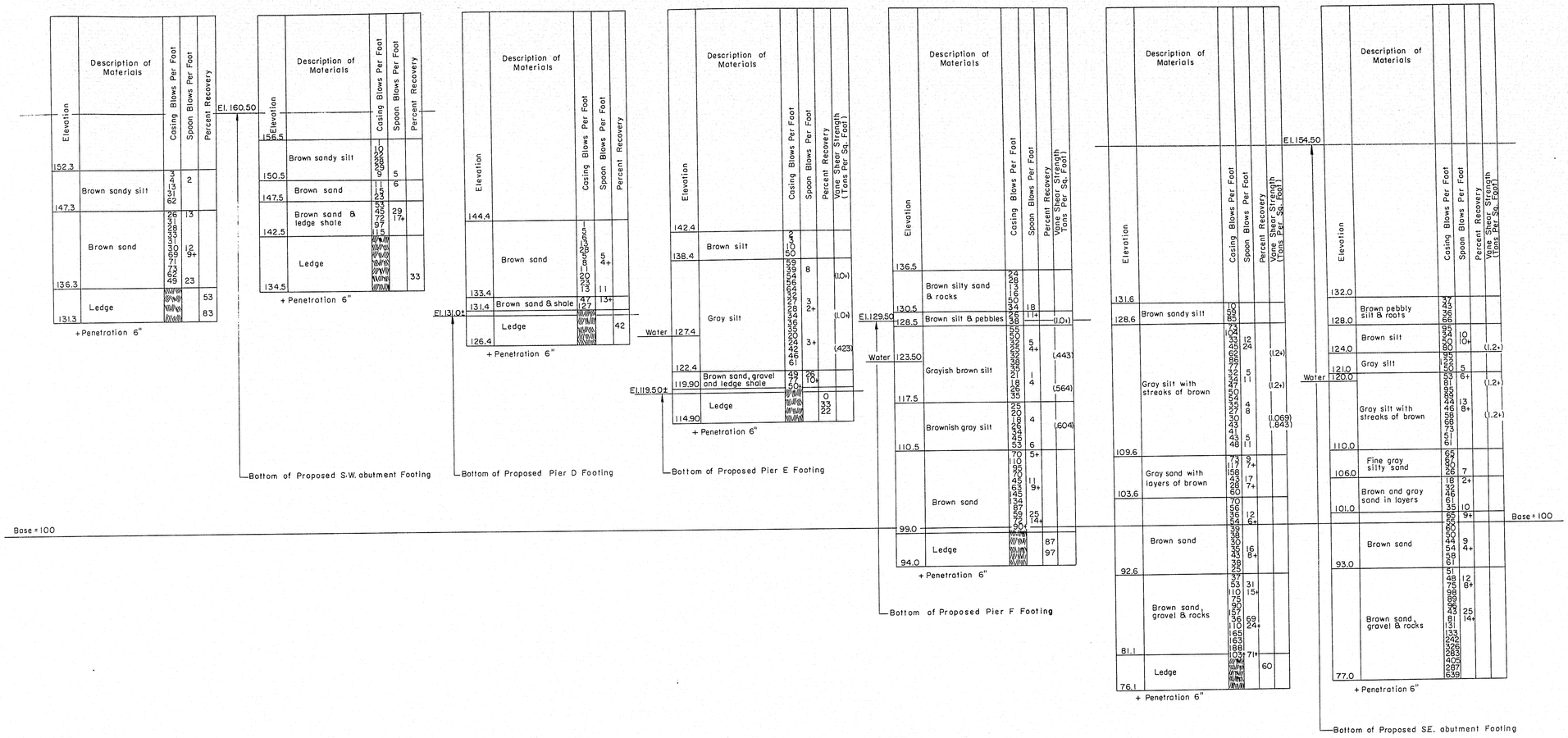
WATERVILLE INTERSTATE

B-83

Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Percent Recovery
158.1				
157.1	Brown silt	8	2	
	Brown sand	1 3 4 3 5 5 5 7 5 7 6 5 5 5 4 3 3 4 3 3 3 4 3 3 3 4 3

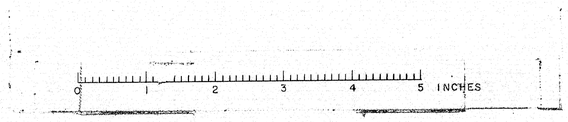
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	10	12

WATERVILLE INTERSTATE



Elev.	Depth in Feet	No. of Blows	Remarks
PB-95			
144.3	4 - 5	31	Exist. Ground
	5 - 6	50	
	6 - 7	55	
	7 - 8	64	
	8 - 9	145	
	9 - 9.5	162	
		Refusal	
PB-98			
140.2	4 - 5	39	Exist. Ground
	5 - 6	50	
	6 - 7	54	
	7 - 8	47	
	8 - 9	84	
	9 - 10	84	
	10 - 11	76	
	11 - 12	61	
	12 - 13	77	
	13 - 14	82	
	14 - 15	78	
	15 - 16	98	
	16 - 17	98	
	17 - 18	77	
	18 - 19	85	
	19 - 20	142	
	20 - 21	142	
	21 - 22	150	
	22 - 22.5	Refusal	
PB-99			
135.5	8 - 9	165	Exist. Ground
	9 - 10	137	
	10 - 11	98	
	11 - 12	95	
	12 - 13	82	
	13 - 14	84	
	14 - 15	96	
	15 - 16	86	
	16 - 17	82	
	17 - 18	92	
	18 - 19	94	
	19 - 20	93	
	20 - 21	103	
	21 - 22	112	
	22 - 23	127	
	23 - 24	118	
	24 - 25	125	
	25 - 26	141	
	26 - 27	142	
	27 - 28	144	
	28 - 29	156	
	29 - 30	144	
	30 - 31	144	
	31 - 32	135	
	32 - 33	120	
	33 - 34	98	
	34 - 35	105	
	35 - 36	112	
	36 - 37	96	
	37 - 38	89	
	38 - 38.5	77	
		Refusal	

SOUTHERLY BRIDGE
BORING LOG
Scale: 1/8" = 1'-0"
For Boring Log notes see Sheet 3



THE CLARKESON ENGINEERING CO., INC.

DESIGN	CHECK H.P	BRIDGE NO.
DRAWN V.S.	APPROVED W.A.H-C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION
INTERSTATE #95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

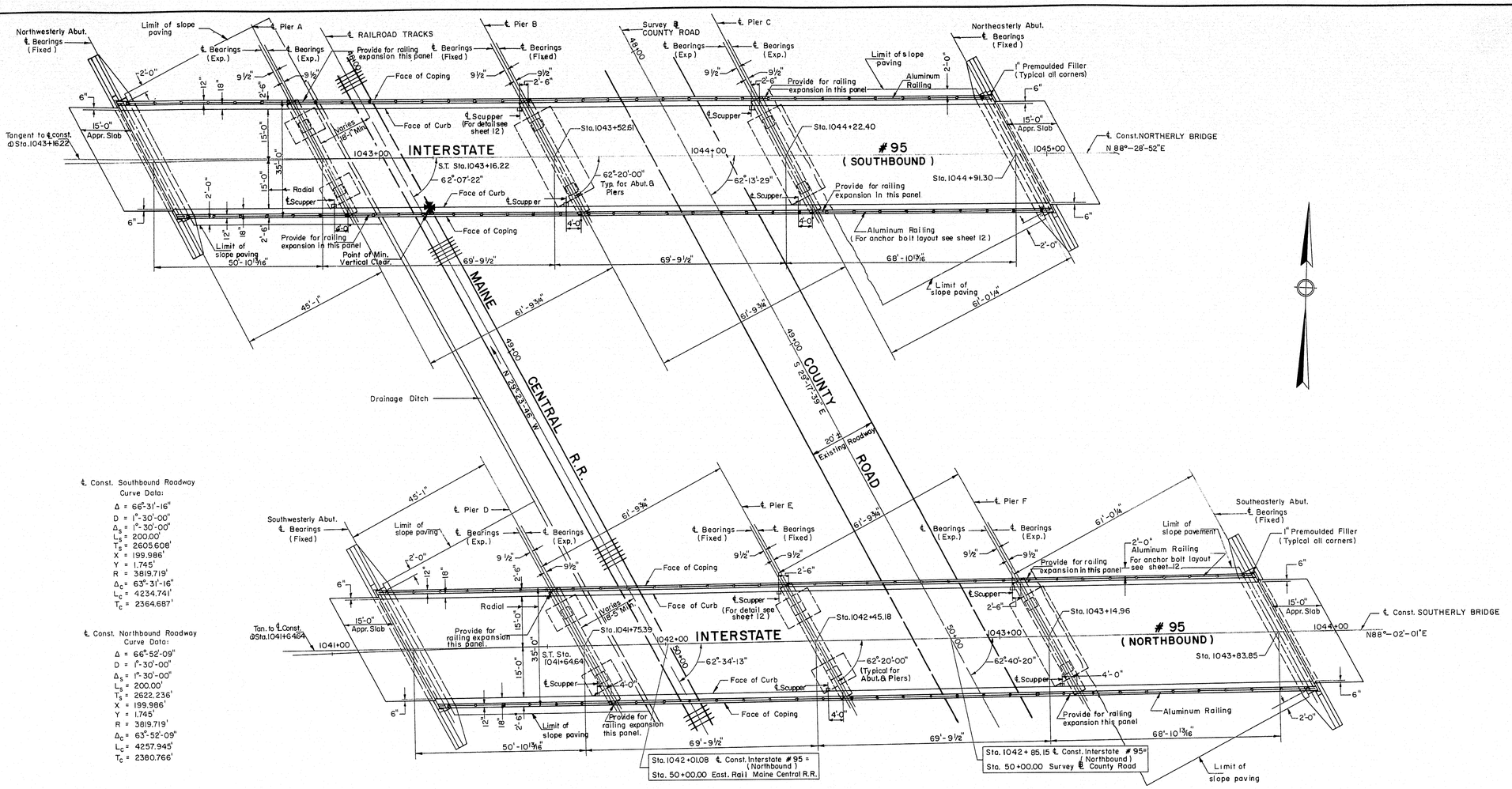
BORING DATA

SHEET 4 OF 12 SHEETS AUGUSTA, MAINE

75-111

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	11	12

WATERVILLE INTERSTATE



GENERAL PLAN

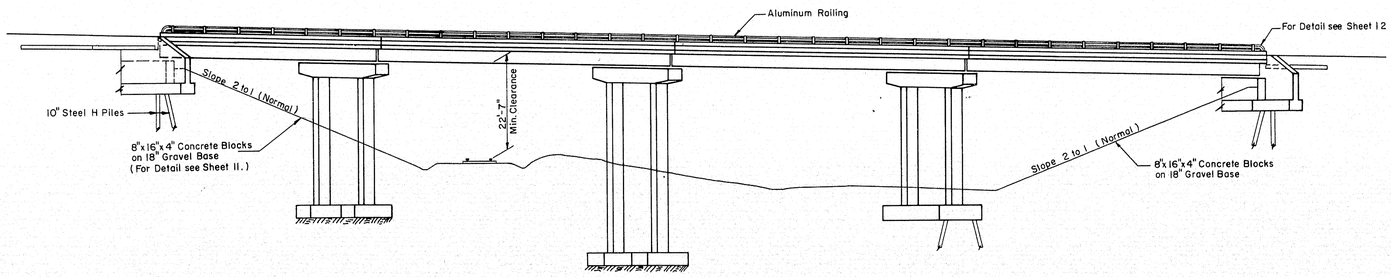
Scale: 1/16" = 1'-0"

℄ Const. Southbound Roadway Curve Data:

- Δ = 66°-31'-16"
- D = 1°-30'-00"
- Δ_s = 1°-30'-00"
- L_s = 200.00'
- T_s = 2605.608'
- X = 199.986'
- Y = 1.745'
- R = 3819.719'
- Δ_c = 63°-31'-16"
- L_c = 4234.741'
- T_c = 2364.687'

℄ Const. Northbound Roadway Curve Data:

- Δ = 66°-52'-09"
- D = 1°-30'-00"
- Δ_s = 1°-30'-00"
- L_s = 200.00'
- T_s = 2622.236'
- X = 199.986'
- Y = 1.745'
- R = 3819.719'
- Δ_c = 63°-52'-09"
- L_c = 4257.945'
- T_c = 2380.766'



GENERAL ELEVATION

Scale: 1/16" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN H.L.	CHECK G.B & H.P.	BRIDGE NO.
DRAWN E.K.	APPROVED W.A.H & C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95 OVER MAINE CENTRAL R.R. & COUNTY ROAD

IN THE CITY OF

WATERVILLE

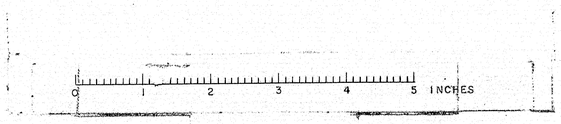
KENNEBEC COUNTY

GENERAL PLAN & ELEVATION

SHEET 5 OF 12 SHEETS AUGUSTA, MAINE

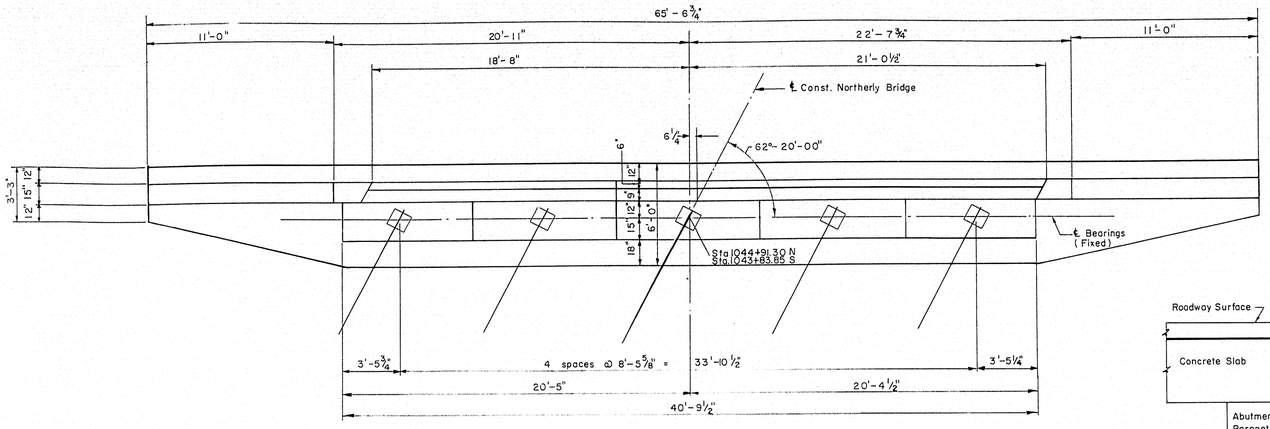
75-112

K+E PHOENIX BLUE 166 D. L. M. INC. 69818



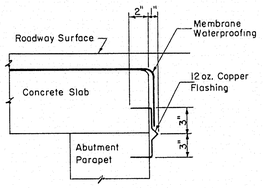
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	12	78.24

WATERVILLE INTERSTATE

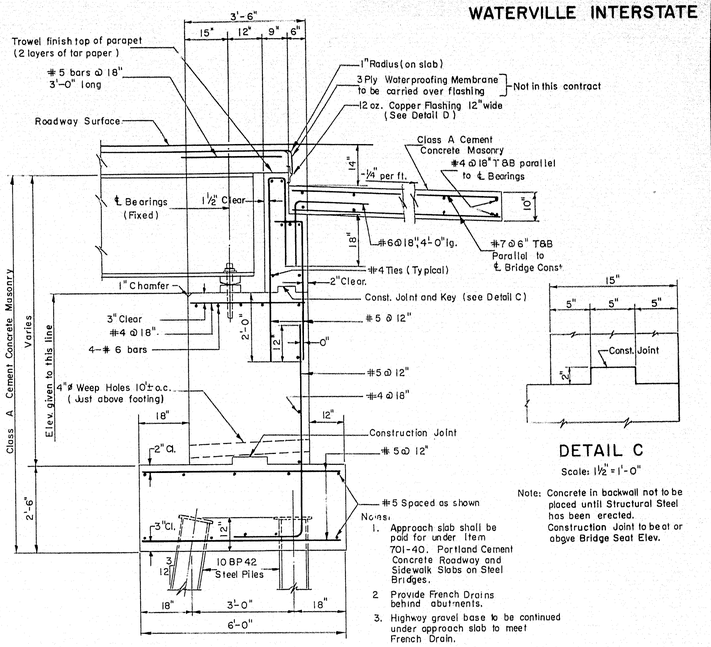


PLAN NORTHEASTERLY ABUTMENT
PLAN SOUTHEASTERLY ABUTMENT SAME

Scale: ½" = 1'-0"



DETAIL D
Scale: 1½" = 1'-0"

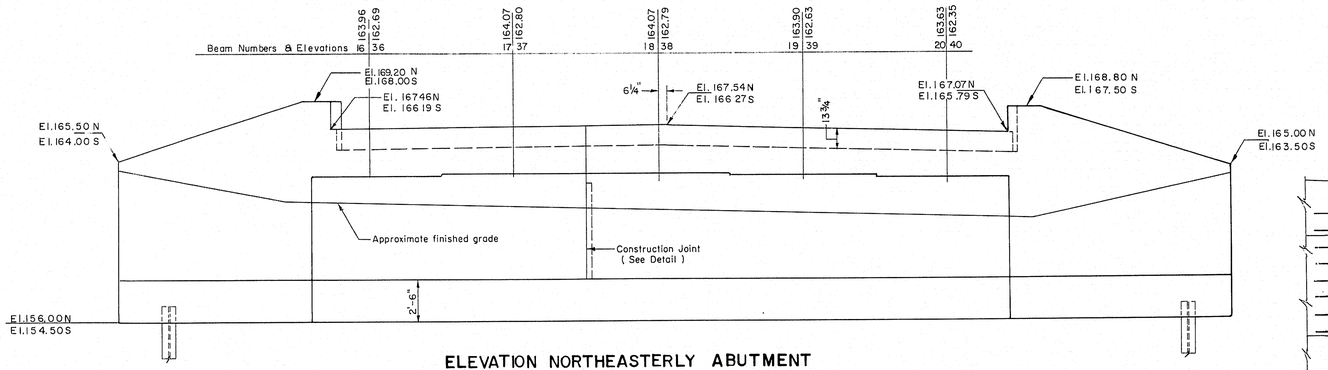


Notes:
1. Approach slab shall be paid for under Item 701-40. Portland Cement Concrete Roadway and Sidewalk Slabs on Steel Bridges.
2. Provide French Drains behind abutments.
3. Highway gravel base to be continued under approach slab to meet French Drain.

TYPICAL ABUTMENT SECTION
Scale: ½" = 1'-0"

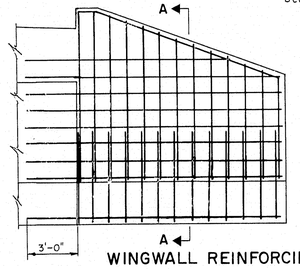
DETAIL C
Scale: 1½" = 1'-0"

Note: Concrete in backwall not to be placed until Structural Steel has been erected. Construction Joint to be at or above Bridge Seat Elev.

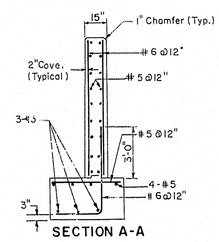


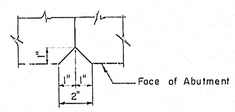
ELEVATION NORTHEASTERLY ABUTMENT
ELEVATION SOUTHEASTERLY ABUTMENT SIMILAR

Scale: ¼" · 1'-0"

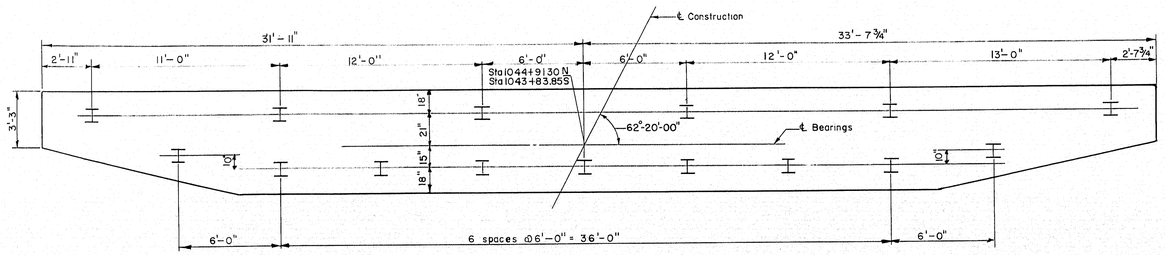


WINGWALL REINFORCING LAYOUT
Scale: ¼" = 1'-0"





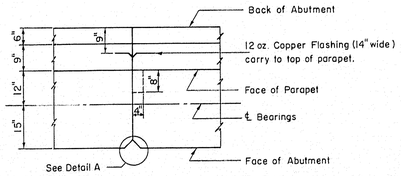
DETAIL A
(CONSTRUCTION JOINT)
Scale: 3" = 1'-0"



PILE PLAN NORTHEASTERLY ABUTMENT
PILE PLAN SOUTHEASTERLY ABUTMENT SAME

Scale: ¼" = 1'-0"

Note: For General Pile Data (See Sheet 7)



ABUTMENT CONSTRUCTION JOINT
Scale: ½" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN	J.T.	CHECK	J.M. - H.P.	BRIDGE NO.
DRAWN	D.A.T.	APPROVED	W.A.H. - C.J.M.	SURVEY PLOT

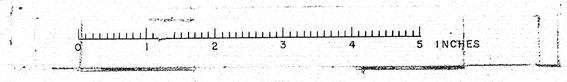
STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
EASTERLY ABUTMENTS

SHEET 6 OF 12 SHEETS — AUGUSTA, MAINE

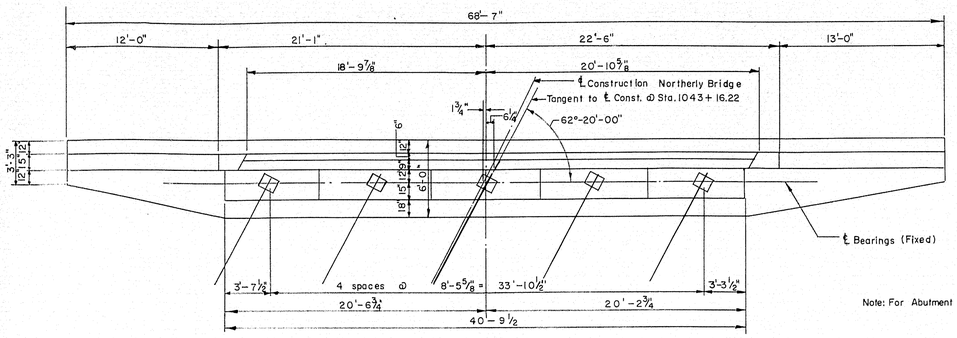
75-113

K+E PHOENIX BLUE 155 @ TRADEM. DUPL. D. L. M. INC. 65810



B. P. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	13	24

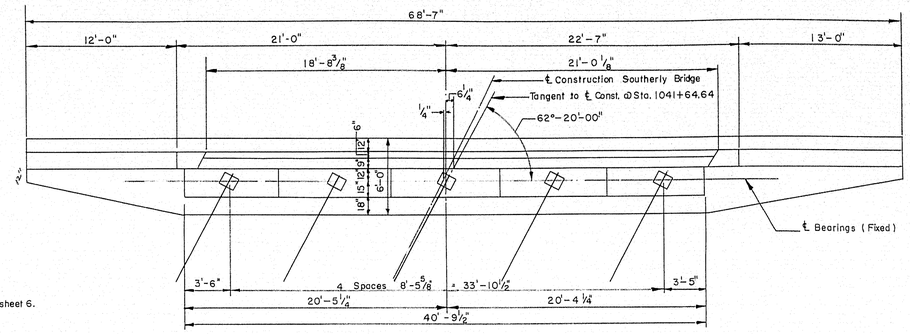
WATERVILLE .INTERSTATE



PLAN NORTHWESTERLY ABUTMENT

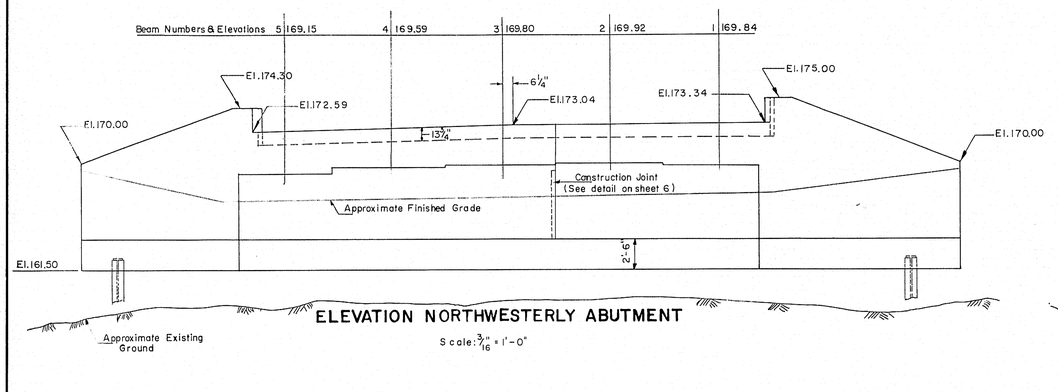
Scale: 3/16" = 1'-0"

Note: For Abutment Section and details see sheet 6.



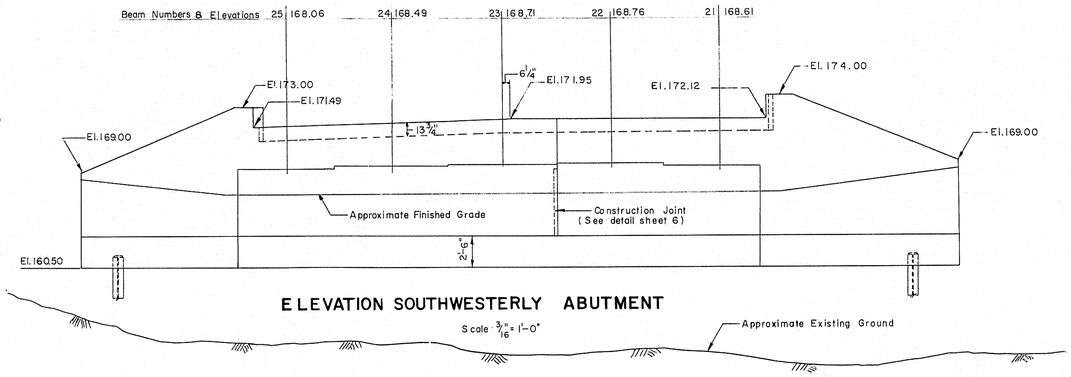
PLAN SOUTHWESTERLY ABUTMENT

Scale: 3/16" = 1'-0"



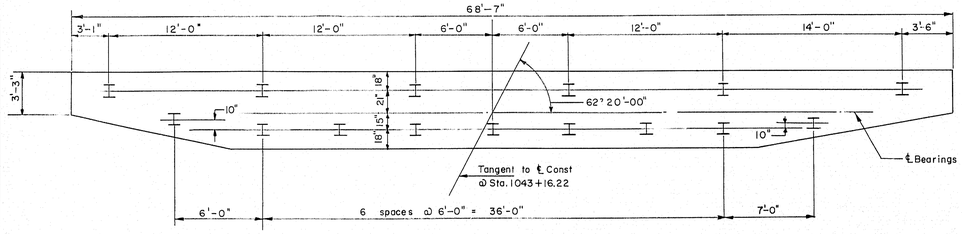
ELEVATION NORTHWESTERLY ABUTMENT

Scale: 3/16" = 1'-0"



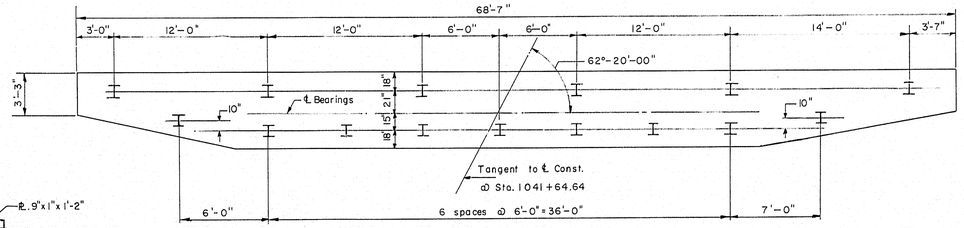
ELEVATION SOUTHWESTERLY ABUTMENT

Scale: 3/16" = 1'-0"



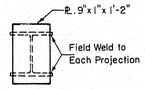
PILE PLAN NORTHWESTERLY ABUTMENT

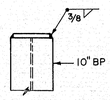
Scale: 3/16"-1'-0"



PILE PLAN SOUTHWESTERLY ABUTMENT

Scale: 3/16" = 1'-0"





PILE CAP DETAILS

Scale: 3/4" = 1'-0"

Notes:

1. All piles to be 10BP42.
2. Maximum pile load = 32 Tons.
3. Front piles to be battered 3 on 12.
4. All piles shall be driven to ledge or practical refusal.
5. Cap all piles (See detail).

THE CLARKESON ENGINEERING CO., INC.			
DESIGN J.T.	CHECK J.M. & H.P.	BRIDGE NO.	
DRAWN D.A.T.	APPROVED WAH- C.J.M.	SURVEY PLOT	

STATE HIGHWAY COMMISSION

INTERSTATE #95

OVER

MAINE CENTRAL R.R.

& COUNTY ROAD

IN THE CITY OF

WATERVILLE

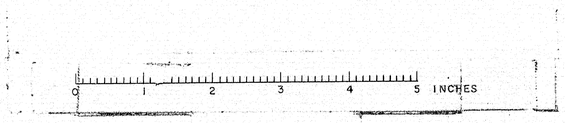
KENNEBEC COUNTY

WESTERLY ABUTMENTS

SHEET 7 OF 12 SHEETS AUGUSTA, MAINE

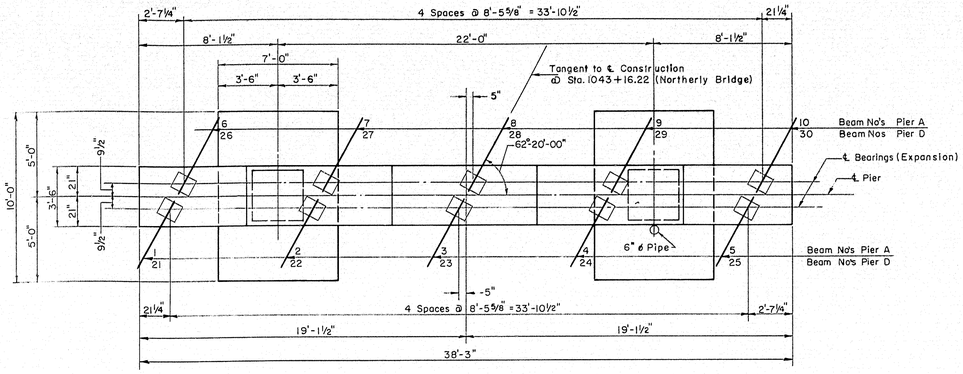
75-114

K+E PRODUCTS BLUE 103 D. L. M. INC. 65818



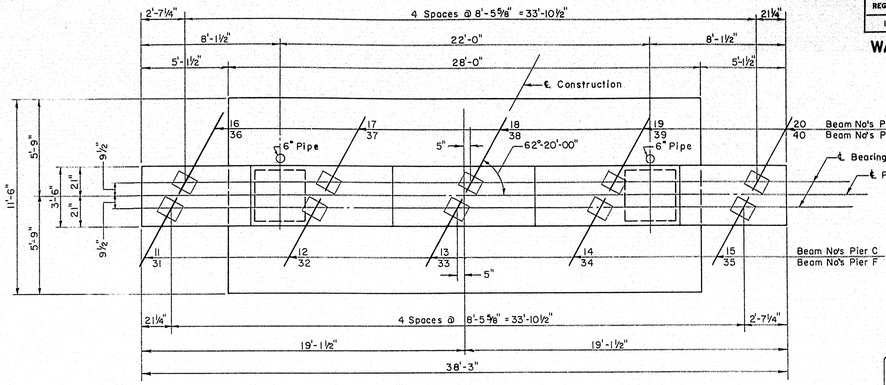
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	14	18

WATERVILLE INTERSTATE



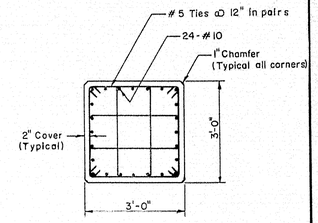
PLAN PIER A
PLAN PIER D SIMILAR

Scale: ¼" = 1'-0"



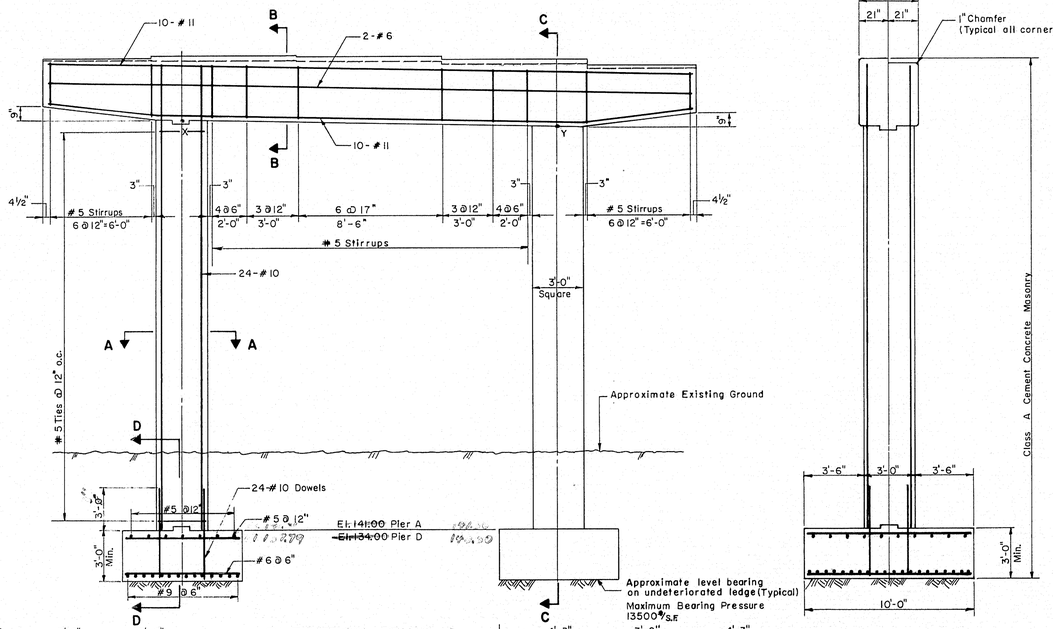
PLAN PIER C
PLAN PIER F SIMILAR

Scale: ¼" = 1'-0"



SECTION A-A

Scale: ½" = 1'-0"

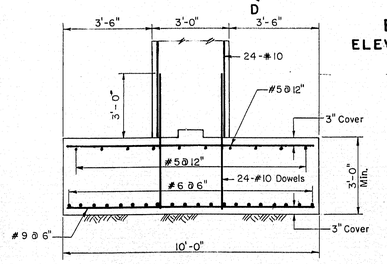


ELEVATION PIER A
ELEVATION PIER D SIMILAR

Scale: ¼" = 1'-0"

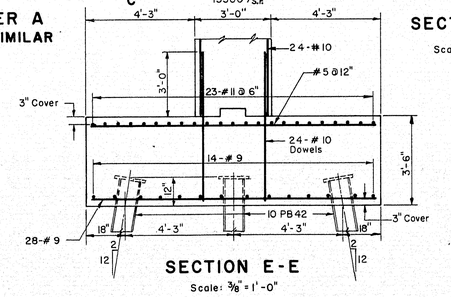
SECTION C-C

Scale: ¼" = 1'-0"



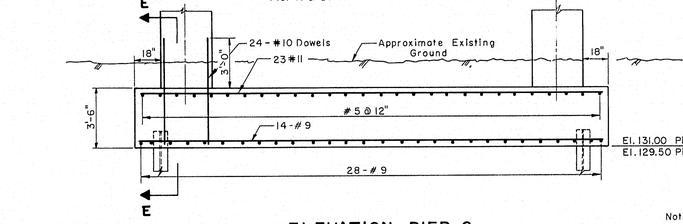
SECTION D-D

Scale: ⅜" = 1'-0"



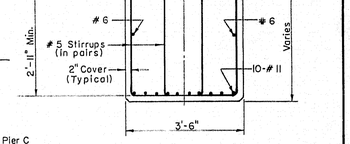
SECTION E-E

Scale: ⅜" = 1'-0"



ELEVATION PIER C
ELEVATION PIER F SIMILAR

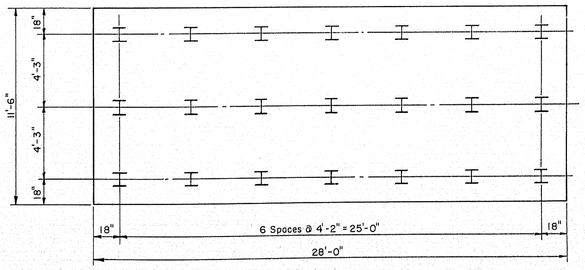
Scale: ¼" = 1'-0"



SECTION B-B

Scale: ½" = 1'-0"

Notes:
1. All piles to be 10BP42.
2. Maximum pile load 35 Tons.
3. Exterior rows of piles battered 2 on 12.
4. All piles shall be driven to ledge or practical refusal.
5. Cap all piles (See Detail on Sheet 7)



PILE PLAN PIER C
PILE PLAN PIER F SIMILAR

Scale: ⅛" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.		
DESIGN D.M.S	CHECK J.I.M.-H.P	BRIDGE NO.
DRAWN E.K.	APPROVED W.A.H.-C.J.M.	SURVEY PLOT

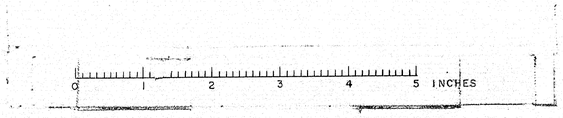
STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MAINE CENTRAL R.R. & COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

PIERS A, C, D & F

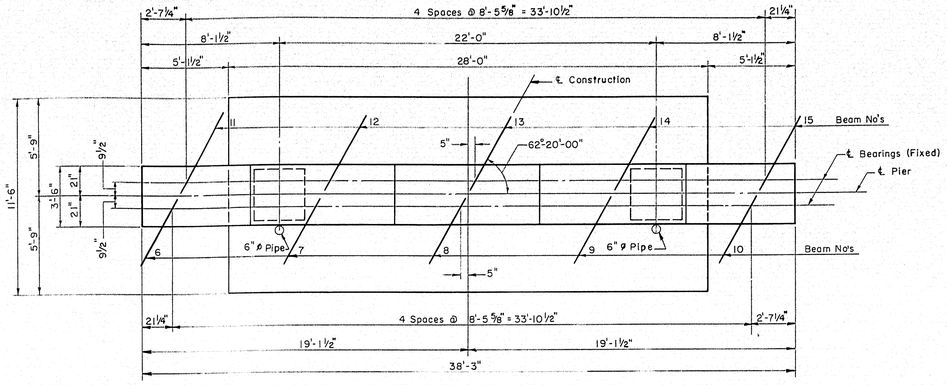
SHEET 8 OF 12 SHEETS — AUGUSTA, MAINE

75-115



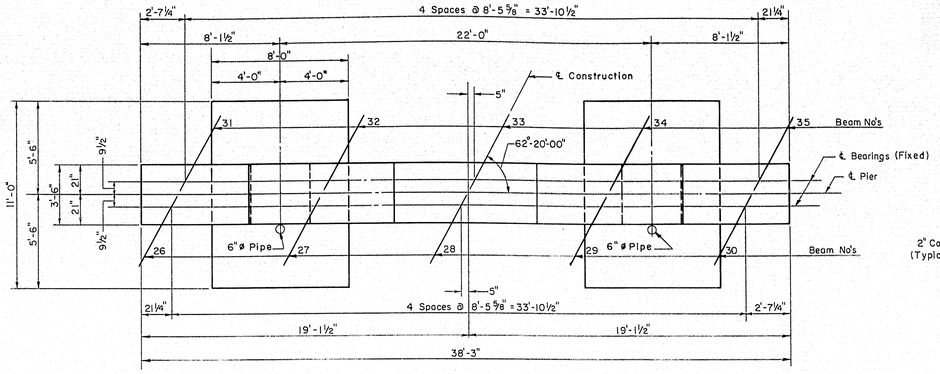
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	15	18

WATERVILLE INTERSTATE



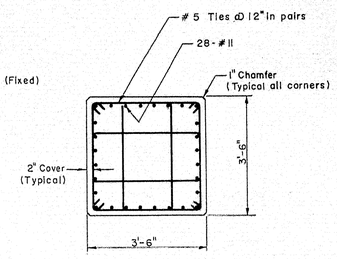
PLAN PIER B

Scale: ¼" = 1'-0"



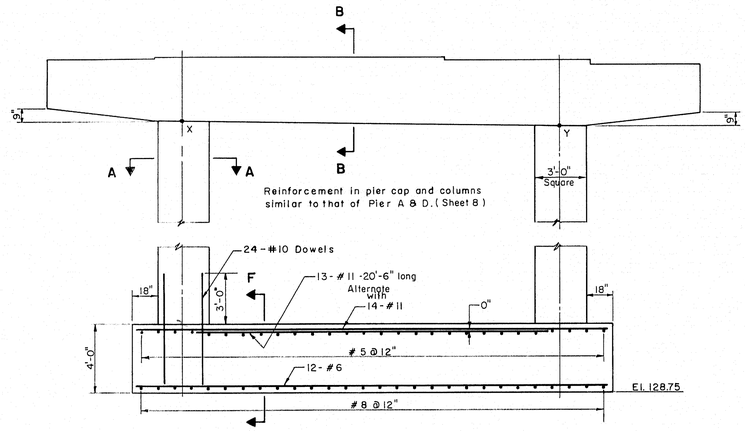
PLAN PIER E

Scale: ¼" = 1'-0"



SECTION H-H

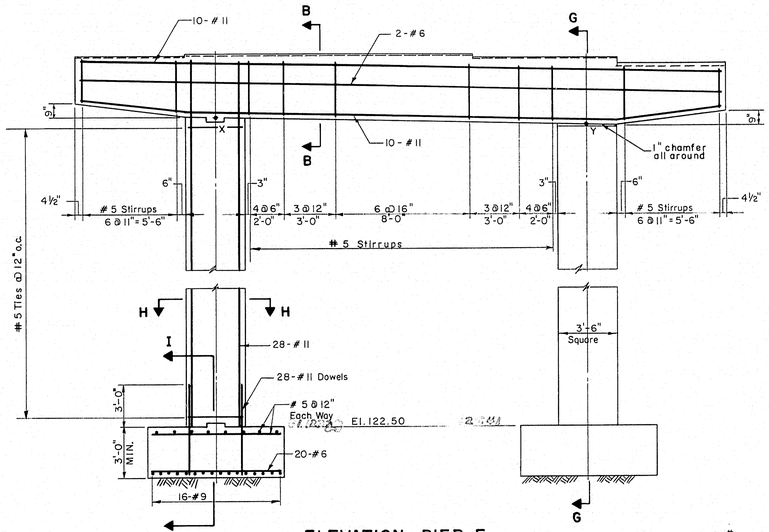
Scale: ½" = 1'-0"



ELEVATION PIER B

Maximum Bearing Pressure 5,200#/S.F.

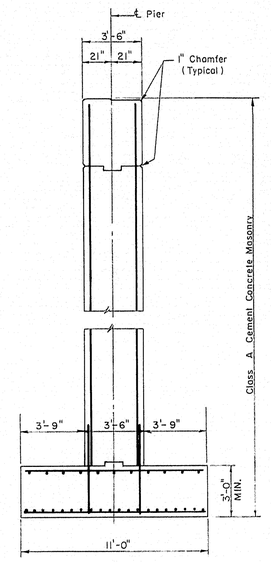
Scale: ¼" = 1'-0"



ELEVATION PIER E

Maximum Bearing Pressure 12,200#/S.F.

Scale: ¼" = 1'-0"

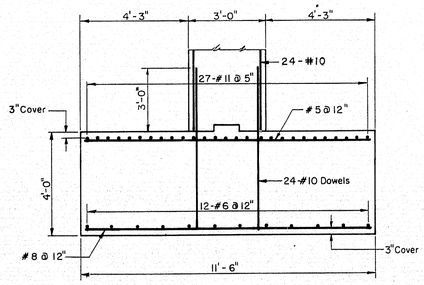


SECTION G-G

Scale: ¼" = 1'-0"

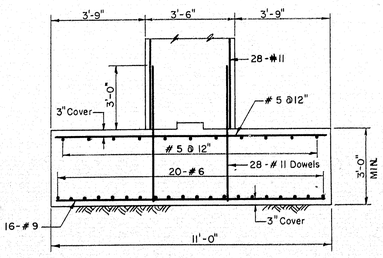
SCHEDULE OF BEAM SEAT ELEVATIONS																	
Beam No.	Pier A		Beam No.	Pier B		Beam No.	Pier C		Beam No.	Beam	Pier D		Beam No.	Pier E		Beam No.	Pier F		Beam No.
1	168.63	168.50	6	166.86	166.83	11	165.42	165.38	16	21	167.40	167.27	26	165.70	165.67	31	164.20	164.16	36
2	168.80	168.45	7	166.98	166.94	12	165.53	165.49	17	22	167.62	167.27	27	165.81	165.77	32	164.31	164.27	37
3	168.75	168.41	8	166.98	166.94	13	165.53	165.49	18	23	167.63	167.28	28	165.81	165.77	33	164.30	164.26	38
4	168.54	168.19	9	166.81	166.77	14	165.36	165.33	19	24	167.41	167.06	29	165.64	165.60	34	164.14	164.10	39
5	168.11	167.98	10	166.54	166.50	15	165.09	165.05	20	25	166.98	166.85	30	165.37	165.33	35	163.86	163.82	40

ELEVATION AT TOP OF COLUMNS		
Pier	Elevation	
	X	Y
A	165.00	164.50
B	163.30	163.00
C	161.90	161.50
D	163.70	163.30
E	162.10	161.80
F	160.60	160.30



SECTION F-F

Scale: ⅜" = 1'-0"



SECTION I-I

Scale: ⅜" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN D.M.S.	CHECK J.I.M. - H.P.	BRIDGE NO.
DRAWN E.K.	APPROVED W.A.H. - C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

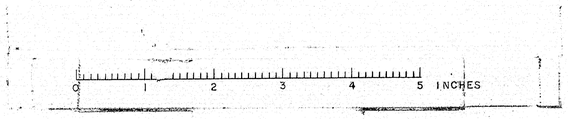
INTERSTATE #95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD

IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

PIERS B & E

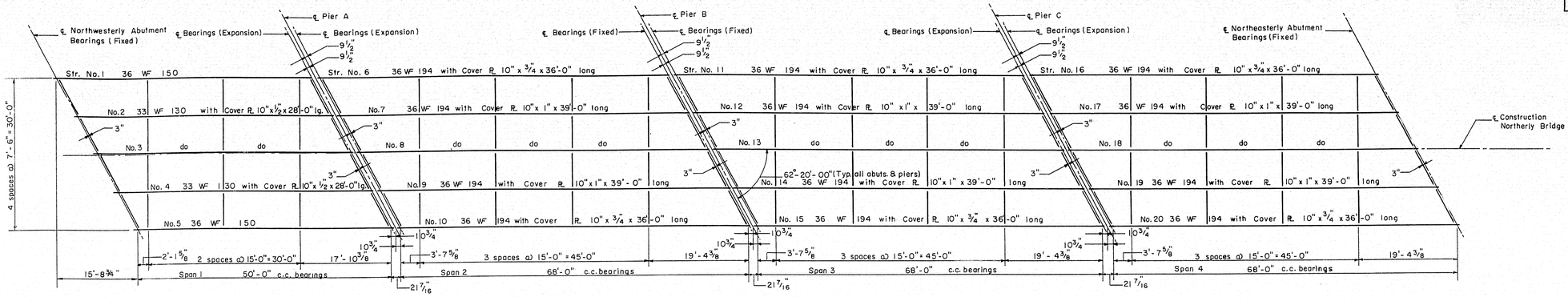
SHEET 9 OF 12 SHEETS AUGUSTA, MAINE

75-116



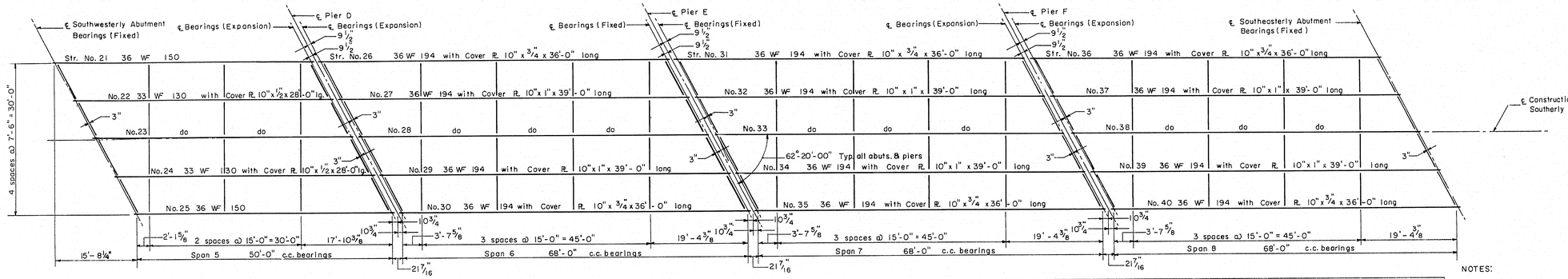
B. P. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	16	24

WATERVILLE INTERSTATE



FRAMING PLAN NORTHERLY BRIDGE

Scale: 3/32" = 1'-0"



FRAMING PLAN SOUTHERLY BRIDGE

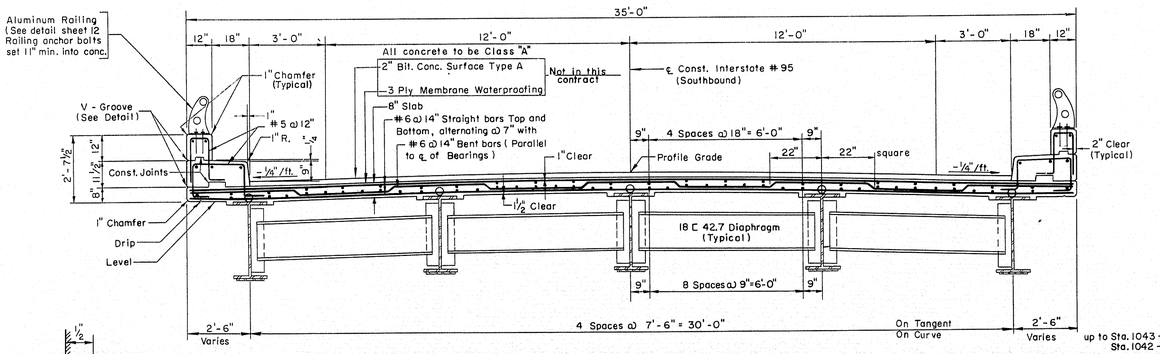
Scale: 3/32" = 1'-0"

ELEVATIONS OF BOTTOM OF ROADWAY SLAB

Beam No.	℄ Brg.	⅛ Point	¼ Point	⅜ Point	℄ Brg.	Beam No.	℄ Brg.	⅛ Point	½ Point	¾ Point	℄ Brg.
1	173.38	173.11	172.82	172.51	172.17	21	172.15	171.88	171.59	171.27	170.94
2	173.24	173.00	172.73	172.43	172.12	22	172.08	171.83	171.56	171.26	170.94
3	173.12	172.89	172.64	172.37	172.07	23	172.03	171.79	171.53	171.25	170.95
4	172.91	172.68	172.43	172.16	171.86	24	171.81	171.59	171.32	171.04	170.73
5	172.69	172.46	172.21	171.94	171.65	25	171.60	171.36	171.10	170.82	170.52
6	172.13	171.79	171.40	170.97	170.50	26	170.90	170.57	170.20	169.79	169.34
7	172.08	171.78	171.43	171.04	170.61	27	170.90	170.60	170.26	169.87	169.44
8	172.04	171.74	171.41	171.02	170.60	28	170.91	170.60	170.26	169.87	169.44
9	171.82	171.54	171.22	170.85	170.44	29	170.69	170.40	170.07	169.69	169.27
10	171.61	171.31	170.98	170.59	170.17	30	170.48	170.17	169.82	169.43	169.00
11	170.46	170.17	169.84	169.46	169.05	31	169.30	168.98	168.65	168.26	167.83
12	170.57	170.28	169.95	169.57	169.16	32	169.40	169.10	168.76	168.36	167.94
13	170.57	170.28	169.95	169.57	169.16	33	169.40	169.09	168.75	168.36	167.93
14	170.41	170.11	169.79	169.41	168.99	34	169.23	168.93	168.59	168.19	167.77
15	170.13	169.84	169.51	169.13	168.72	35	168.96	168.65	168.31	167.92	167.49
16	169.01	168.72	168.38	168.01	167.59	36	167.79	167.49	167.14	166.75	166.32
17	169.12	168.83	168.49	168.12	167.70	37	167.90	167.59	167.25	166.86	166.43
18	169.12	168.82	168.49	168.11	167.70	38	167.89	167.59	167.25	166.85	166.42
19	168.96	168.66	168.33	167.95	167.53	39	167.73	167.42	167.08	166.69	166.26
20	168.68	168.39	168.05	167.68	167.26	40	167.45	167.15	166.80	166.41	165.98

NOTES:

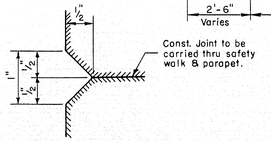
1. All intermediate diaphragms to be 18 C 42.7, for detail see Sheet 11.
2. All end diaphragms to be 15 C 33.9, for details see Sheet 11.
3. For Cover Plate and Shear Connector details see Sheet 11.
4. All beams to be cambered to the extent that the bridge deck under full dead load will follow as nearly as practicable the design profile and in no case with less camber than is likely to remain permanent. The proposed camber diagram shall be submitted to the Engineer for approval.
5. Parapets and safety walks to have transverse construction joints 20'± on centers. Joints are not to be located under railing post. Contact surfaces of joints to be painted with a bituminous material. Exposed surfaces are to be chamfered ½" Reinforcing steel to be carried thru joints.
6. All concrete in deck slab of each span shall be placed in one continuous operation.
7. 3-Ply Membrane Waterproofing and Bituminous Concrete Surfacing are not in this contract.
8. Top flange of stringers to be cut parallel to ℄ bearings.



TYPICAL CROSS SECTION

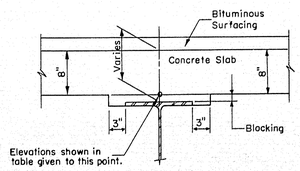
Scale: 3/8" = 1'-0"

Notes:
1. All longitudinal reinforcing to be # 4 Bars spaced as shown (Parallel to ℄ Construction)
2. Normal cross section as shown from Sta. 1043+50 Northerly Bridge and Sta. 1042+00 Southerly Bridge. Banked section up to these stations (see Bank Data on Sheet 2)



V-GROOVE DETAIL

Not to Scale



DETAIL OF HAUNCH

Scale: 1" 0"

NOTE:
After the structural steel is erected and before forms are built or concrete is placed elevations on the top flange of the beams are to be obtained at the points indicated in the table. The difference between these elevations and those shown in the table give the actual blocking distance from top of beam to bottom of slab. See Haunch Detail.

THE CLARKESON ENGINEERING CO., INC.

DESIGN J.I.M.	CHECK J.T. - H.P.	BRIDGE NO. SURVEY
DRAWN J.T - V.S.	APPROVED W.A.H. - C.J.M.	PLOT

STATE HIGHWAY COMMISSION

INTERSTATE # 95
OVER
MAINE CENTRAL R.R. & COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

FRAMING PLAN & TYPICAL CROSS SECTION

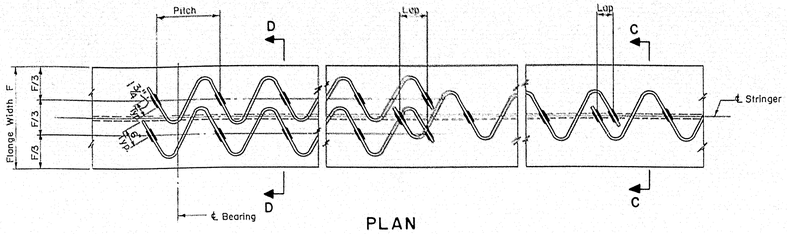
SHEET 10 OF 12 SHEETS AUGUSTA, MAINE

75-117

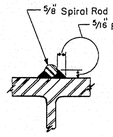
K&E PHOENIX BLUE 185 D. L. M. INC.

B.P.R. REG. NO	STATE	PROJECT NO.	SHEET NO	TOTAL SHEETS
1	MAINE	1-95-6(23)	17	1824

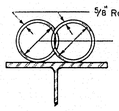
WATERVILLE INTERSTATE



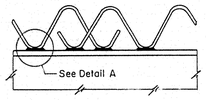
PLAN



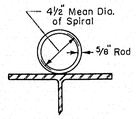
DETAIL A



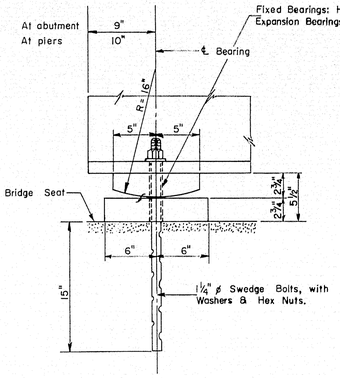
SECTION D-D



ELEVATION

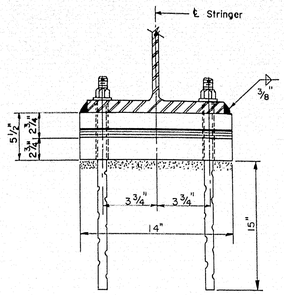


SECTION C-C

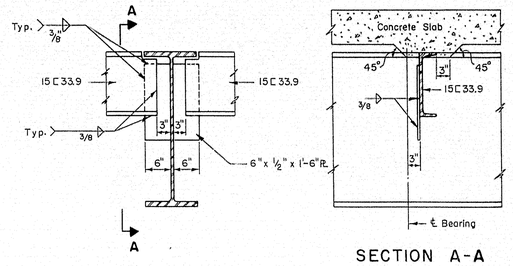


EXPANSION & FIXED BEARING DETAIL

Scale: 1½" = 1'-0"



Note: All anchor bolts to be centered true before bearing plates are set in position.

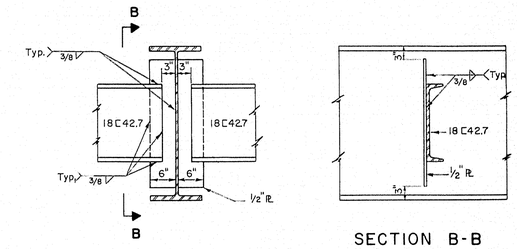


SECTION A-A

WELDED END DIAPHRAGM CONNECTION

Scale: ¾" = 1'-0"

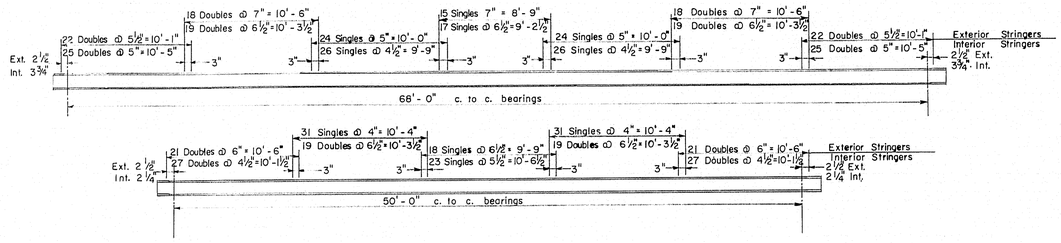
Note: Welds to be shop or field welded.



SECTION B-B

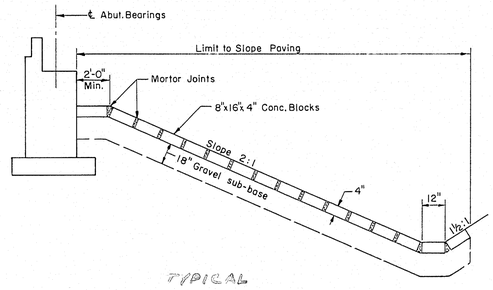
WELDED DIAPHRAGM CONNECTION

Scale: ¾" = 1'-0"



TYPICAL SPIRAL SHEAR CONNECTORS
(DETAILS & LAYOUT)

NOT TO SCALE

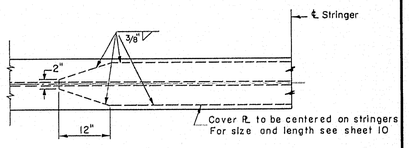


TYPICAL

SLOPE PAVING DETAIL
(WESTERLY ABUTMENTS)

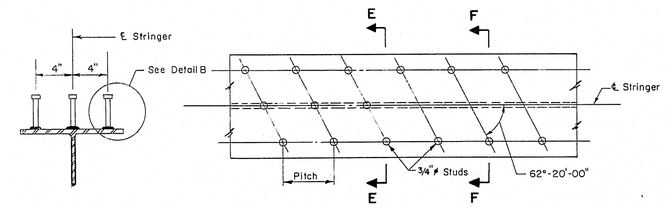
Not to Scale

~~Notes: At Easterly Abutments stop slope paving at existing ground.~~



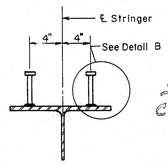
COVER PLATE DETAIL

NOT TO SCALE



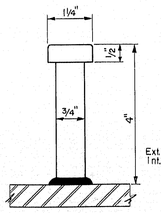
SECTION E-E

PLAN

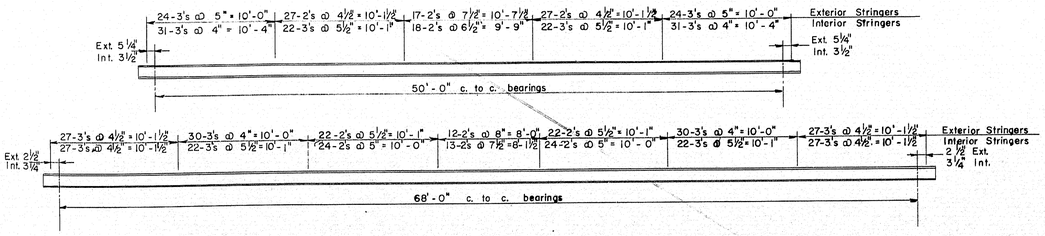


SECTION F-F

SPIRAL SHEAR CONNECTORS USED

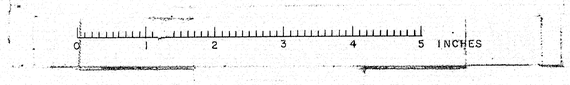


DETAIL B



TYPICAL STUD SHEAR CONNECTORS
(DETAILS & LAYOUT)

NOT TO SCALE



THE CLARKESON ENGINEERING CO., INC.

DESIGN R.F. - J.T.	CHECK J.I.M. - H.R.	BRIDGE NO.
DRAWN E.K.	APPROVED W.A.H. - C.J.M	SURVEY PLOT

STATE HIGHWAY COMMISSION

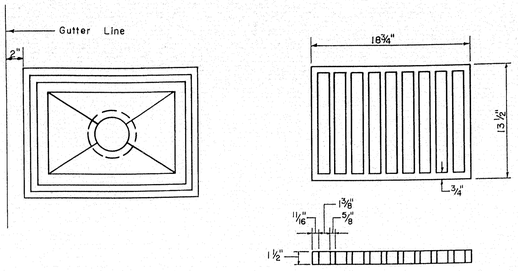
INTERSTATE #95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
SUPERSTRUCTURE DETAILS

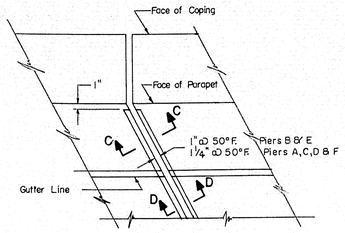
SHEET 11 OF 12 SHEETS AUGUSTA, MAINE

75-118

B. R. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	18	18

WATERVILLE INTERSTATE





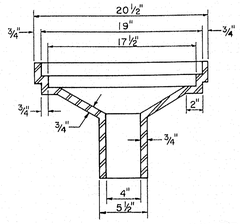
FIXED & EXPANSION JOINT PLAN

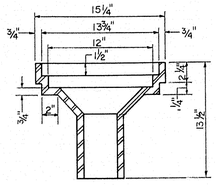
Scale: 1" = 1'-0"

Note:
All welds to be ⅜" fillets.

SAFETY WALK

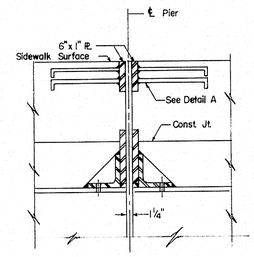
Scale: 1" = 1'-0"





SCUPPER DETAILS

Scale: 1½" = 1'-0"

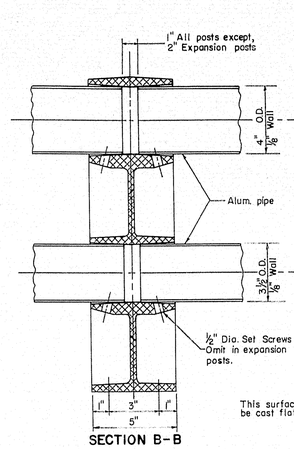


SECTION C-C

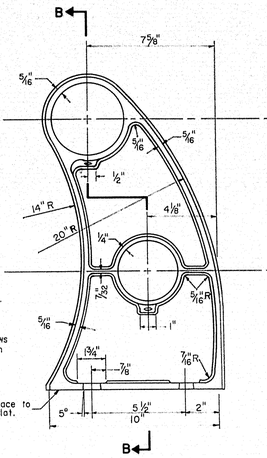
Scale: 1" = 1'-0"

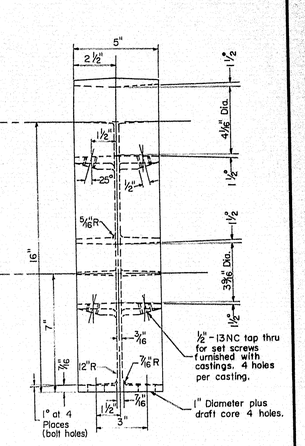
SECTION D-D

Scale: 1" = 1'-0"



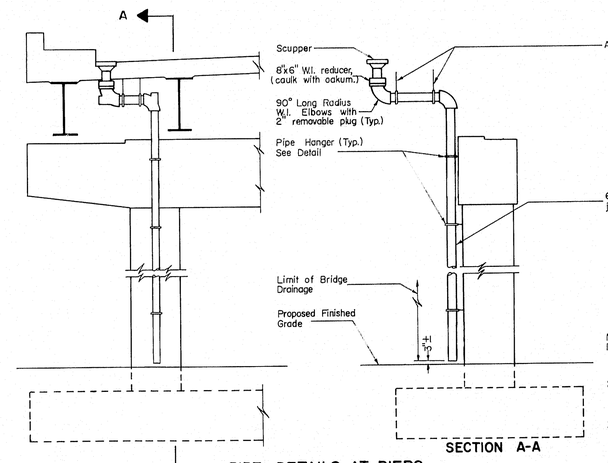
SECTION B-B





ALUMINUM RAIL DETAILS

Scale: 3" = 1'-0"

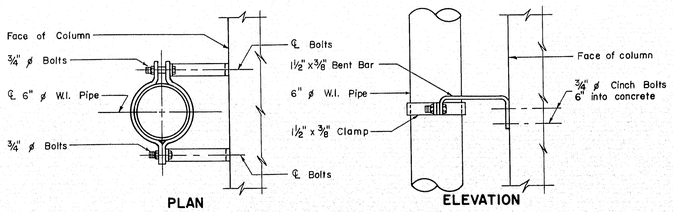


SECTION A-A

PIPE DETAILS AT PIERS

Scale: ¼" = 1'-0"

Notes:
1. Piping to be behind pier column out of sight of traffic.
2. All pipes and fittings to be W.I. standard weight with horizontal runs on 2% grade.
3. All joints to be welded except as shown.
4. For location of scuppers see sheet 5
5. The contractor shall submit complete drawings of the piping system to the Engineer for approval.



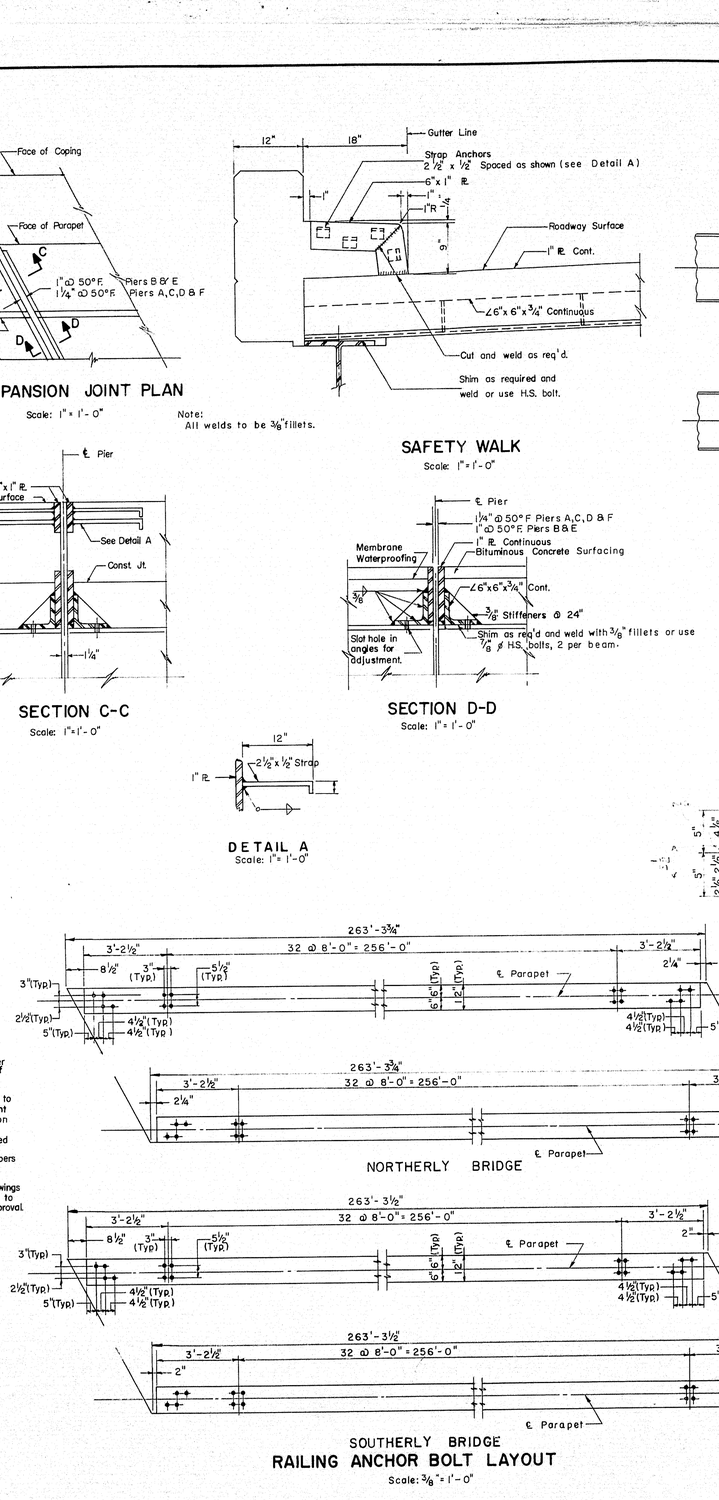
PLAN ELEVATION

PIPE HANGER DETAILS

Scale: 1½" = 1'-0"

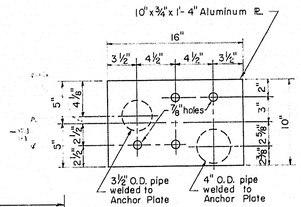
DETAIL A

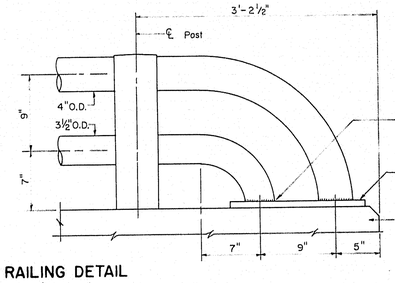
Scale: 1" = 1'-0"



RAILING ANCHOR BOLT LAYOUT

Scale: ⅜" = 1'-0"



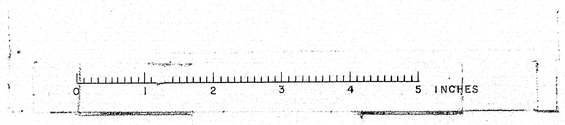


END RAILING DETAIL

Scale: 1½" = 1'-0"

Note: 1. Any variation in railing dimensions shall be submitted for approval.
2. All anchor bolts, nuts, and washers to be aluminum alloy.
3. All anchor bolts to be ¾" ø bolts set 11" into concrete.

Note: 3-Ply Membrane Waterproofing and Bituminous Concrete Surfacing not in this contract.



THE CLARKESON ENGINEERING CO., INC.

DESIGN J.I.M.	CHECK J.T.-H.R	BRIDGE NO. SURVEY
DRAWN R.E.M.	APPROVED WAH-C.J.M.	PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MAINE CENTRAL R.R. & COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

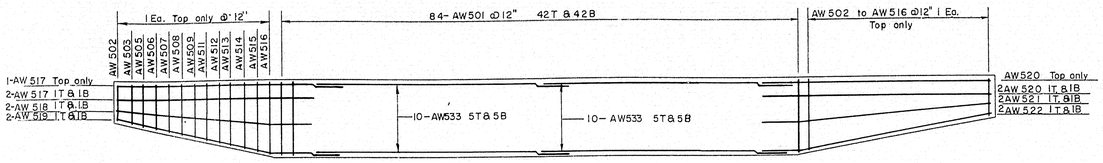
DETAILS

SHEET 12 OF 12 SHEETS AUGUSTA, MAINE

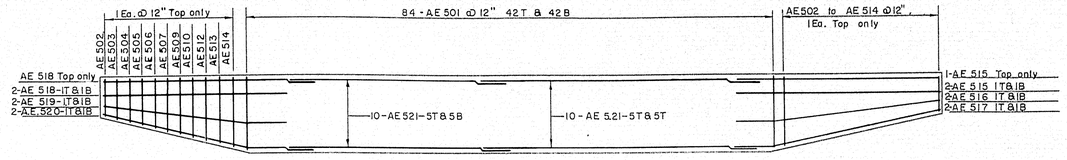
75-119

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	19	24

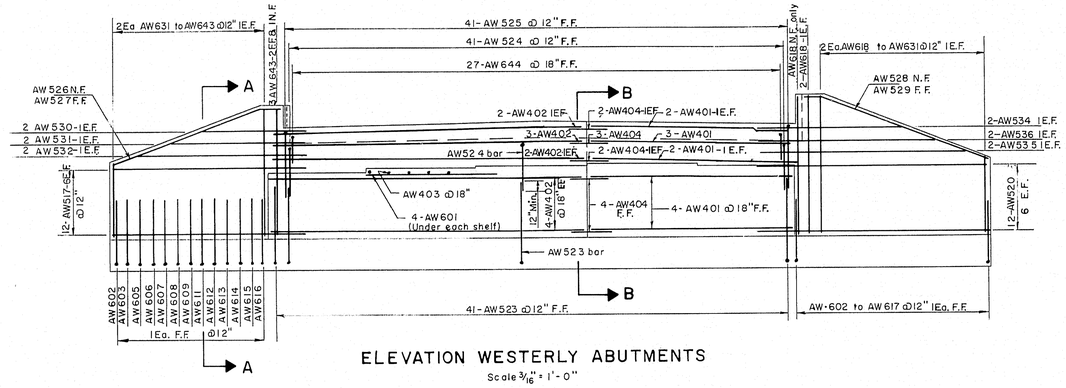
WATERVILLE INTERSTATE



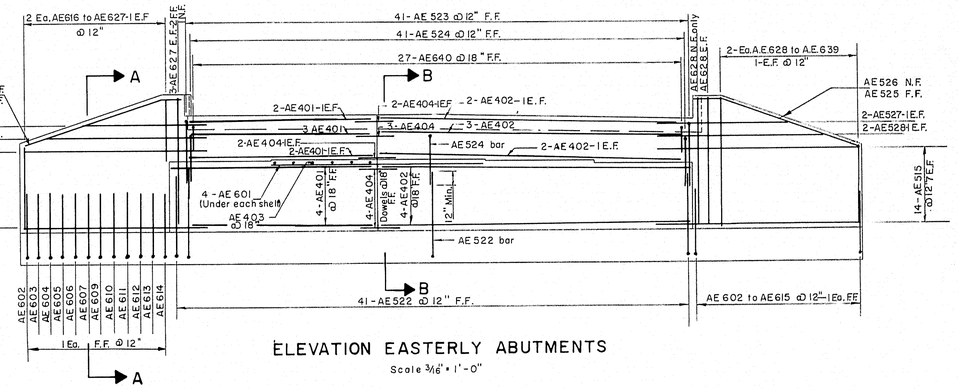
PLAN WESTERLY ABUTMENTS
Scale 3/16" = 1'-0"



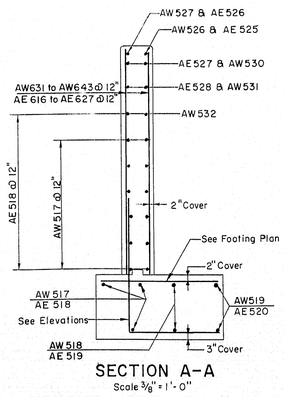
PLAN EASTERLY ABUTMENTS
Scale 3/16" = 1'-0"



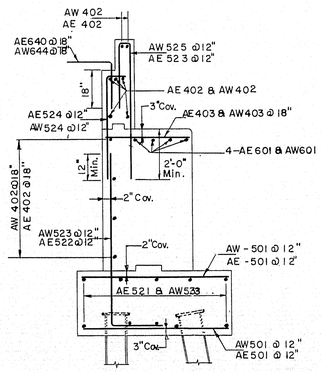
ELEVATION WESTERLY ABUTMENTS
Scale 3/16" = 1'-0"



ELEVATION EASTERLY ABUTMENTS
Scale 3/16" = 1'-0"



SECTION A-A
Scale 3/8" = 1'-0"



SECTION B-B
Scale 3/8" = 1'-0"

NOTE: Bars Prefixed AW are for Westerly Abutments.
Bars Prefixed AE are for Easterly Abutments.

ESTIMATED QUANTITIES

WESTERLY ABUTMENTS	9,779 LBS.
EASTERLY ABUTMENTS	9,443 LBS.

THE CLARKESON ENGINEERING CO., INC.

DESIGN G.B.	CHECK H.L.	BRIDGE NO.
DRAWN F.E.T.	APPROVED WAH-CJM	SURVEY PLOT

STATE HIGHWAY COMMISSION

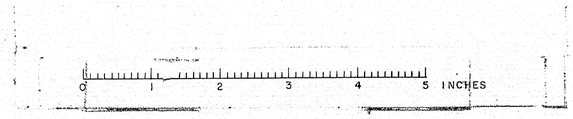
INTERSTATE #95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD

IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
ABUTMENT REINFORCMENT

SHEET 1 OF 6 SHEETS — AUGUSTA, MAINE

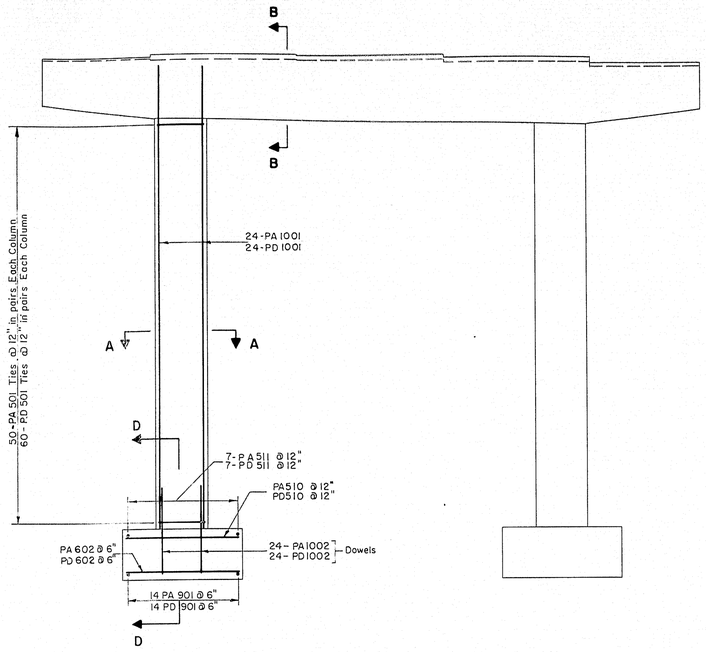
75-120

K-E PHOENIX BLUE 160 D. L. M. INC. 68819



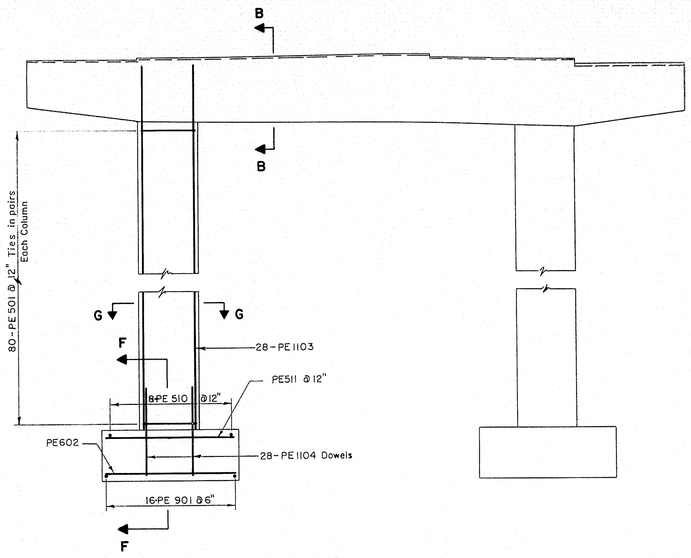
B. P. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	20	24

WATERVILLE INTERSTATE



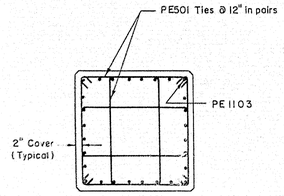
ELEVATION PIER A
ELEVATION PIER D SIMILAR

Scale: 1/4" = 1'-0"



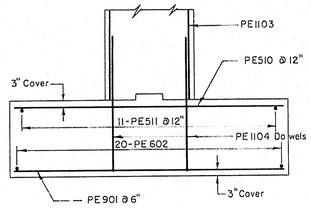
ELEVATION PIER E

Scale: 1/4" = 1'-0"



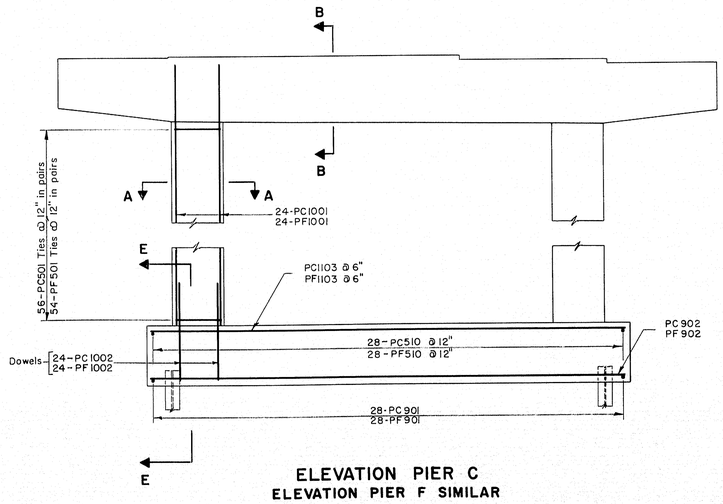
SECTION G-G

Scale: 1/2" = 1'-0"



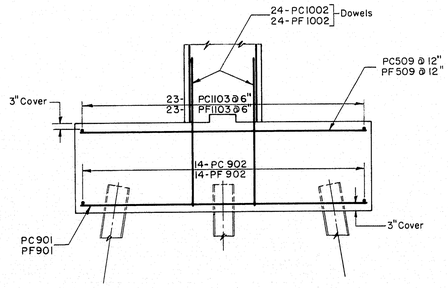
SECTION F-F

Scale: 3/8" = 1'-0"



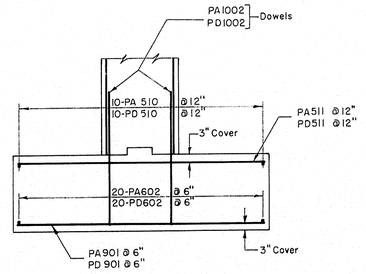
ELEVATION PIER C
ELEVATION PIER F SIMILAR

Scale: 1/4" = 1'-0"



SECTION E-E

Scale: 3/8" = 1'-0"



SECTION D-D

Scale: 3/8" = 1'-0"

ESTIMATED QUANTITIES

PIER A	14,294 LBS.
PIER C	19,765 LBS.
PIER D	15,704 LBS.
PIER E	23,312 LBS.
PIER F	19,776 LBS

Note: For Sections A-A & B-B See Sheet 3.
For reinforcement in caps See Sheet 3.
Bars prefixed PA, PB, PC, PD, PE, & PF are for Piers A, B, C, D, E & F respectively.

THE CLARKESON ENGINEERING CO., INC.

DESIGN G.B	CHECK H.L.	BRIDGE NO.
DRAWN E.K.	APPROVED W.A.H.-C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MAINE CENTRAL R.R. & COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

PIERS A,C,D,E & F REINFORCEMENT

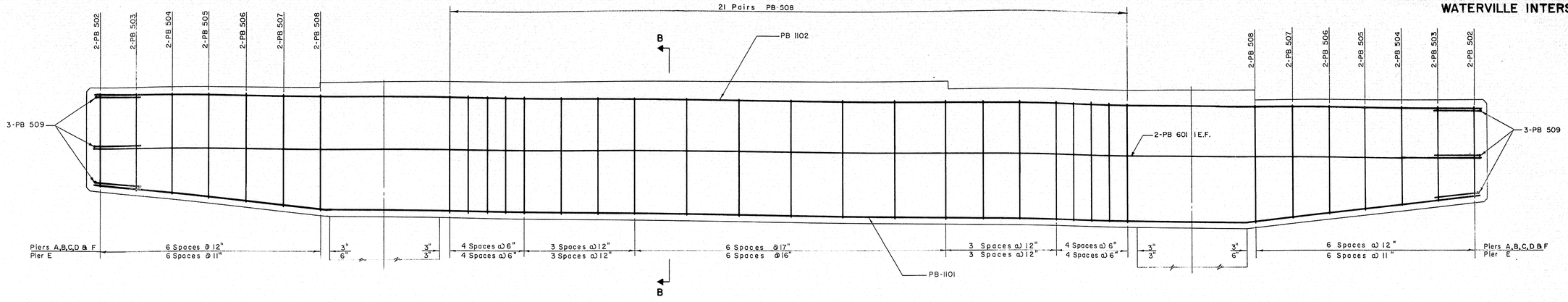
SHEET 2 OF 6 SHEETS AUGUSTA, MAINE

75-121

K+E PHOENIX BLUE 188 TRACING CLOTH D. L. M. INC. 64910

B. P. R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	21	24

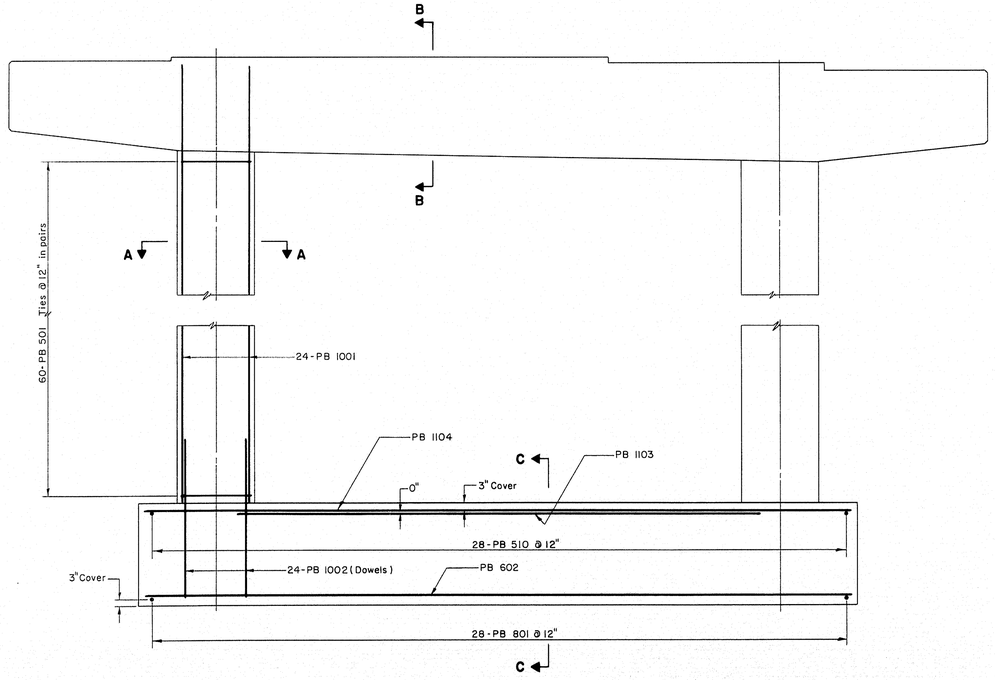
WATERVILLE INTERSTATE



PIER B CAP ELEVATION

Scale: 3/4" = 1'-0"

Note: Reinforcing in Pier Caps A, C, D, E & F similar except to be prefixed PA, PC, PD, PE, & PF respectively.

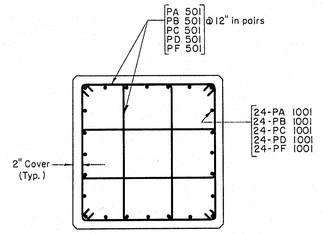


PIER B ELEVATION

Scale: 3/8" = 1'-0"

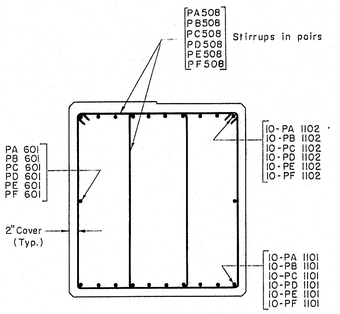
ESTIMATED QUANTITIES

PIER B . . . . . 19,668 LBS.



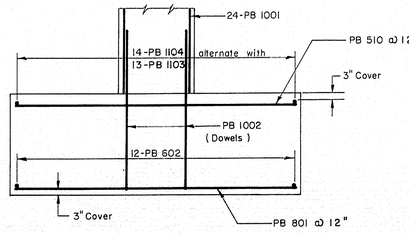
SECTION A-A

Scale: 3/4" = 1'-0"



SECTION B-B

Scale: 3/4" = 1'-0"



SECTION C-C

Scale: 3/8" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN G.B.	CHECK H.L.	BRIDGE NO.
DRAWN E.K.	APPROVED W.A.H-C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

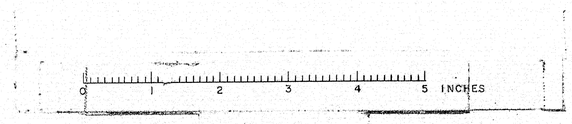
INTERSTATE #95
OVER
MAINE CENTRAL R.R. & COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

PIER B REINFORCEMENT

SHEET 3 OF 6 SHEETS AUGUSTA, MAINE

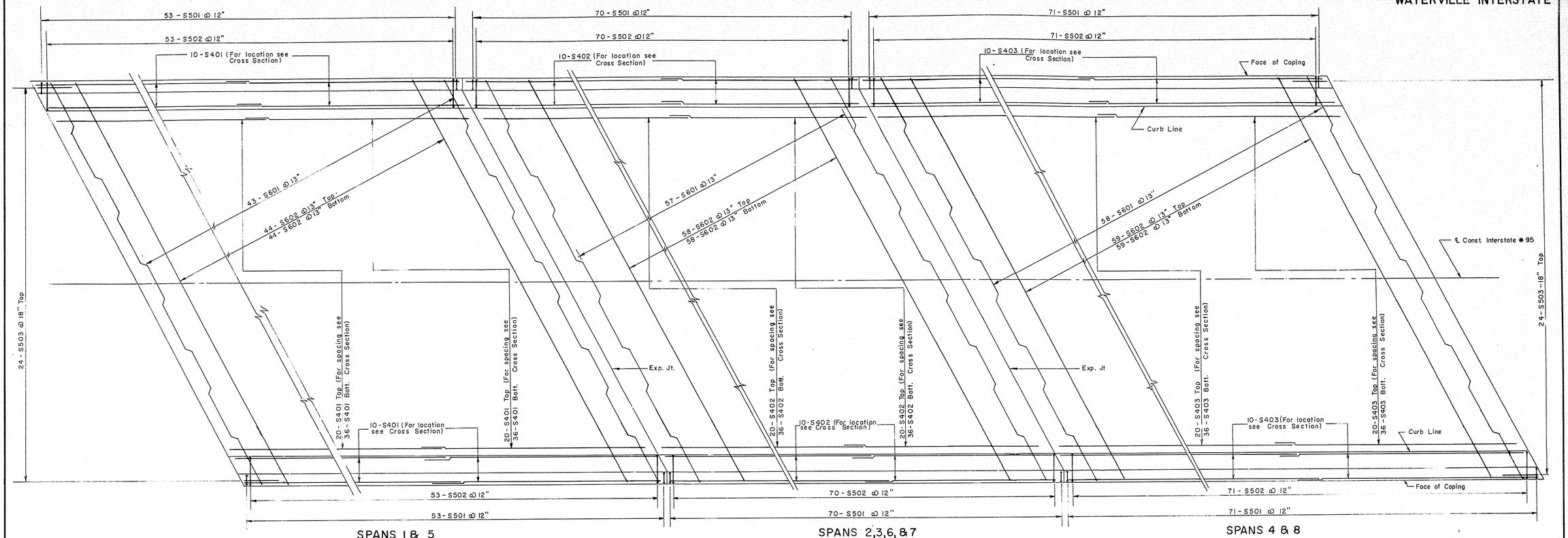
75-122

K&E PHOENIX BLUE 105 D. L. M. INC. 68815



B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	22	24

WATERVILLE INTERSTATE



SPANS 1 & 5

SPANS 2,3,6, & 7

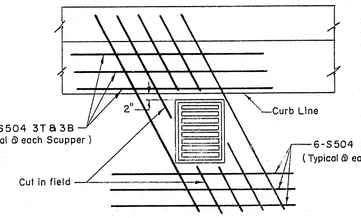
SPANS 4 & 8

DECK SLAB REINFORCEMENT

Scale 1/4" = 1'-0"

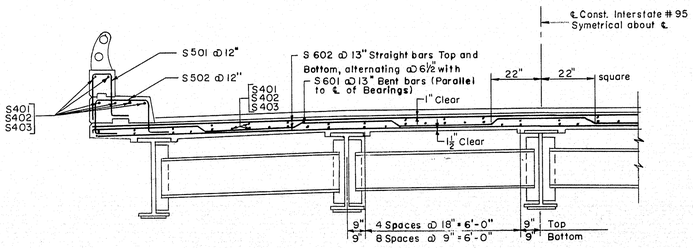
ESTIMATED QUANTITIES

DECK SLABS	117,701 LBS.
APPROACH SLABS	17,151 LBS.



SCUPPER REINFORCEMENT

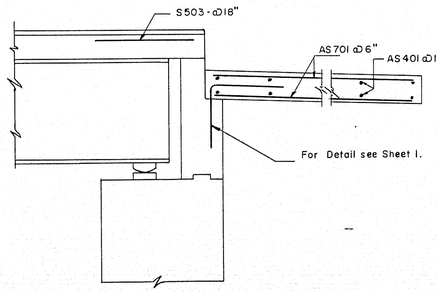
Scale: 1/2" = 1'-0"



TYPICAL CROSS SECTION

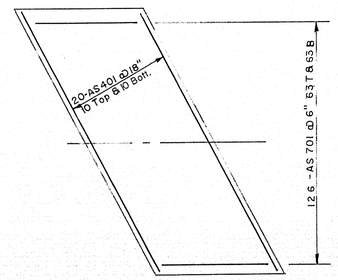
Scale 3/8" = 1'-0"

Note:
All longitudinal Reinforcing to be # 4 Bars spaced as shown (Parallel to ℄ Construction)



TYPICAL CROSS SECTION (APPROACH SLAB)

Scale 1/2" = 1'-0"



APPROACH SLAB REINFORCEMENT

Scale 1/8" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN G.B. - H.L.	CHECK G.B. - H.L.	BRIDGE NO.
DRAWN F.E.T.	APPROVED W.A.H. - C.J.M.	SURVEY PLOT

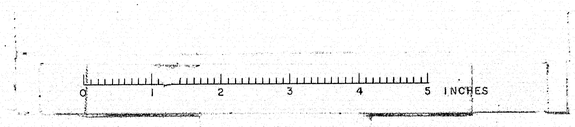
STATE HIGHWAY COMMISSION

INTERSTATE # 95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
DECK REINFORCEMENT

SHEET 4 OF 6 SHEETS — AUGUSTA, MAINE

75-123

K&E PEERLESS BLUE 105 @ TRACING CLOTH D, L, M, INC. 46815



Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
				EASTERLY ABUTMENTS													
1	22	4	16'-0"	AE 401	Str.												
2	22	4	24'-5"	AE 402	↑												
3	58	4	3'-2"	AE 403													
4	22	4	4'-0"	AE 404													
5	168	5	5'-8"	AE 501													
6	4	↓	2'-11"	AE 502													
7	↑		3'-2"	AE 503													
8			3'-5"	AE 504													
9			3'-8"	AE 505													
10	↓		3'-10"	AE 506													
11	4		4'-0"	AE 507													
12	2		4'-2"	AE 508													
13	4		4'-4"	AE 509													
14	4		4'-7"	AE 510													
15	2		4'-10"	AE 511													
16	4		5'-0"	AE 512													
17	4		5'-3"	AE 513													
18	4		5'-6"	AE 514	↓												
19	34		16'-0"	AE 515	Str.												
20	4		16'-2"	AE 516	19		3'-0"	13'-2"					0'-5"		3'-0"		16'-2"
21	4		16'-4"	AE 517	19		3'-0"	13'-4"					0'-7"		3'-0"		16'-4"
22	34		14'-6"	AE 518	Str.												
23	4		14'-6"	AE 519	19		3'-0"	11'-6"					0'-5"		3'-0"		14'-6"
24	4		14'-8"	AE 520	19		3'-0"	11'-8"					0'-7"		3'-0"		14'-8"
25	40		21'-4"	AE 521	Str.												
26	82		8'-5"	AE 522	20		2'-0"	6'-5"									
27	82		8'-11"	AE 523	S10		6'-0"	0'-5"	2'-6"								
28	82		5'-7"	AE 524	20		0'-11"	4'-8"									
29	4		12'-7"	AE 525	19		1'-3"	11'-4"					0'-6"		1'-3"		12'-7"
30	4		13'-4"	AE 526	19		2'-0"	11'-4"					0'-7"		2'-0"		13'-4"
31	8	↓	10'-6"	AE 527	Str.												
32	8	5	13'-6"	AE 528	Str.												
33	40	6	9'-6"	AE 601	Str.												
34	4	↑	7'-2"	AE 602	20		1'-11"	5'-3"									
35	↑		7'-5"	AE 603	↑		2'-2"	↑									
36			7'-8"	AE 604			2'-5"										
37			7'-11"	AE 605			2'-8"										
38	↓		8'-1"	AE 606			2'-10"										
39	4		8'-3"	AE 607			3'-0"										
40	2		8'-5"	AE 608			3'-2"										
41	4		8'-7"	AE 609			3'-4"										
42	↑		8'-10"	AE 610			3'-7"										
43			9'-1"	AE 611			3'-10"										
44			9'-3"	AE 612			4'-0"										
45	↓		9'-6"	AE 613			4'-3"										
46	4		9'-9"	AE 614	↓		4'-6"	↓									
47	2		9'-11"	AE 615	20		4'-8"	5'-3"									
48	4		6'-10"	AE 616	Str.												
49	↑		7'-0"	AE 617	↑												
50			7'-4"	AE 618													
51			7'-8"	AE 619													
52			8'-0"	AE 620													
53			8'-4"	AE 621													
54			8'-8"	AE 622													
55			9'-2"	AE 623													
56			9'-6"	AE 624													
57	↓		9'-11"	AE 625													
58	4		10'-3"	AE 626													
59	10		10'-7"	AE 627													
60	10		10'-4"	AE 628													
61	4		10'-0"	AE 629													
62	↑		9'-8"	AE 630													
63			9'-3"	AE 631													
64			8'-9"	AE 632													
65			8'-5"	AE 633													
66			8'-1"	AE 634													
67			7'-9"	AE 635													
68			7'-5"	AE 636													
69			7'-1"	AE 637													
70	↓		6'-7"	AE 638	↓												
71	4	↓	6'-3"	AE 639	Str.												
72	54	6	4'-0"	AE 640	17		1'-10"	2'-2"									
73																	
74																	
75																	
76																	
77																	
78																	
79																	
80																	
81																	

Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
82				WESTERLY ABUTMENTS													
83	22	4	16'-0"	AW 401	Str.												
84	22	4	24'-5"	AW 402	↑												
85	58	4	3'-2"	AW 403													
86	22	4	4'-0"	AW 404													
87	168	5	5'-8"	AW 501													
88	4	↓	2'-11"	AW 502													
89	4		3'-1"	AW 503													
90	2		3'-3"	AW 504													
91	4		3'-5"	AW 505													
92	↑		3'-7"	AW 506													
93			3'-10"	AW 507													
94	↓		4'-0"	AW 508													
95	4		4'-2"	AW 509													
96	2		4'-4"	AW 510													
97	4		4'-6"	AW 511													
98	↑		4'-9"	AW 512													
99			4'-11"	AW 513													
100			5'-2"	AW 514													
101	↓		5'-3"	AW 515													
102	4		5'-6"	AW 516	↓												
103	30		15'-4"	AW 517	Str.												
104	4		15'-5"	AW 518	19		3'-0"	12'-5"					0'-6"		3'-0"		15'-5"
105	4		15'-8"	AW 519	19		3'-0"	12'-8"					0'-8"		3'-0"		15'-8"
106	30		18'-1"	AW 520	Str.												
107	4		18'-2"	AW 521	19		3'-0"	15'-2"					0'-6"		3'-0"		18'-2"
108	4		18'-5"	AW 522	19		3'-0"	15'-5"					0'-8"		3'-0"		18'-5"
109	82		8'-5"	AW 523	20		2'-0"	6'-5"									
110	82		5'-9"	AW 524	20		0'-11"	4'-10"									
111	82		8'-11"	AW 525	S10		6'-0"	0'-5"	2'-6"								
112	2		14'-0"	AW 526	19		1'-5"	12'-7"					0'-8"		1'-5"		14'-0"
113	2		14'-8"	AW 527	19		2'-1"	12'-7"					0'-9"		2'-1"		14'-8"
114	2		14'-9"	AW 528	19		1'-5"	13'-4"					0'-8"		1'-5"		14'-9"
115	2		15'-5"	AW 529	19		2'-1"	13'-4"					0'-9"		2'-1"		15'-5"
116	4		8'-6"	AW 530	Str.												
117	4		11'-0"	AW 531	↑												
118	4		13'-9"	AW 532													
119	40		21'-4"	AW 533													
120	4		12'-0"	AW 534													
121	4	↓	16'-7"	AW 535													
122	4	5	14'-2"	AW 536	↓												
123	40	6	9'-6"	AW 601	Str.												
124	4	↓	7'-2"	AW 602	20		1'-11"	5'-3"									
125	4	↑	7'-4"	AW 603	↑		2'-1"	↑									
126	2		7'-6"	AW 604			2'-3"										
127	4		7'-8"	AW 605			2'-5"										
128	↑		7'-10"	AW 606			2'-7"										
129			8'-1"	AW 607			2'-10"										
130	↓		8'-3"	AW 608			3'-0"										
131	4		8'-5"	AW 609			3'-2"										
132	2		8'-7"	AW 610			3'-4"										
133	4		8'-9"	AW 611			3'-6"										
134	↑		9'-0"	AW 612			3'-9"										
135			9'-2"	AW 613			3'-11"										
136			9'-4"	AW 614			4'-1"										
137	↓		9'-6"	AW 615			4'-3"										
138	4		9'-9"	AW 616	↓		4'-6"	↓									
139	2		9'-11"	AW 617	20		4'-8"	5'-3"									
140	10		10'-10"	AW 618	Str.												
140	4		10'-5"	AW 619	↑												
141	↑		9'-11"	AW 620													
142			9'-8"	AW 621													
143			9'-4"	AW 622													
144			9'-0"	AW 623													
145			8'-7"	AW 624													
146			8'-2"	AW 625													
147			7'-9"	AW 626													
148			7'-4"	AW 627													
149			6'-11"	AW 628													
150	↓		6'-6"	AW 629													
151	4		6'-1"	AW 630													
152	8		5'-9"	AW 631													
153	4		6'-0"	AW 632													
154	↑		6'-4"	AW 633													
155			6'-8"	AW 634													
156			7'-1"	AW 635													
157			7'-5"	AW 636													
158			7'-10"	AW 637													
159			8'-3"	AW 638													
160			8'-8"	AW 639													
161	↓	↓	9'-11"	AW 640	↓												
162	4	6	9'-2"	AW 641	Str.												

Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
163	4	6	9'-6"	AW 642	Str.												
164	10	6	10'-0"	AW 643	Str.												
165	54	6	4'-0"	AW 644	17		1'-10"	2'-2"									
166																	
167																	
168																	
169																	
170																	
171																	
172																	
173																	
174																	
175																	
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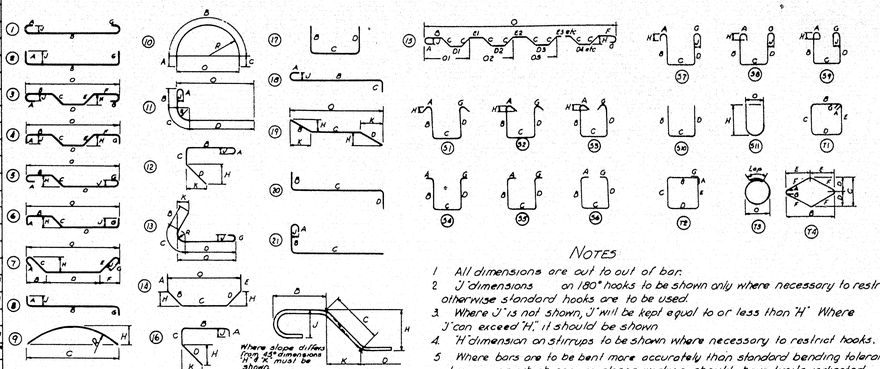
181																	
182																	
183																	
184																	
185																	
186																	
187																	
188																	
189																	
190																	

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
MAINE	I-95-6(23)	23	24

WATERVILLE INTERSTATE

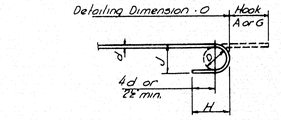
TYPICAL BAR BENDS



ENLARGED VIEW SHOWING BAR BENDING DETAILS

NOTES

1. All dimensions are out to out of bar.
2. 'J' dimensions on 180° hooks to be shown only where necessary to restrict hook size, otherwise standard hooks are to be used.
3. Where 'J' is not shown, 'J' will be kept equal to or less than 'H'. Where 'J' can exceed 'H', it should be shown.
4. 'H' dimension on stirrups to be shown where necessary to restrict hooks.
5. Where bars are to be bent more accurately than standard bending tolerances, bending dimensions which require closer working should have limits indicated.
6. Figures in circles show types.
7. No allowance for bend curvature is to be made except for standard hook & radii in excess of same.



STANDARD HOOK DETAIL

BAR SIZES

Equivalent Size	Present (Numbers)
¼"ø	#2
⅜"ø	#3
½"ø	#4
⅝"ø	#5
¾"ø	#6
⅞"ø	#7
1"ø	#8
1⅛"ø	#9
1¼"ø	#10
1⅜"ø	#11

8. Bar reinforcement metal shall conform to the requirements of the Standard Specifications for new Billet-Steel Concrete Reinforcement Bars (Intermediate Grade) Serial Designation A.A.S.H.O. M31-48 or its latest revision. All bars shall be deformed to conform with A.S.T.M. Specifications A 305-49.

THE CLARKESON ENGINEERING CO. INC.

DESIGN H. L.	CHECK G.B.	BRIDGE NO.
DRAWN J.S.	APPROVED W.A.H. - C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

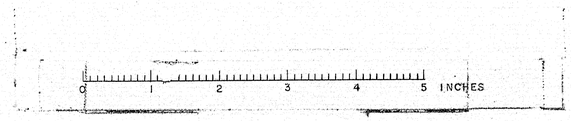
INTERSTATE #95
OVER
MAINE CENTRAL R.R. & COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

REINFORCING SCHEDULE

SHEET 5 OF 6 SHEETS — AUGUSTA, MAINE

75-124

PRINTED BY SPAULDING MOSS CO. BOSTON, MASS. 16 ORDER NO. G-1301



B.P.R. REG.NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	24	24

WATERVILLE INTERSTATE

Item	No. Pieces	Size	Length	Mark	Type	A	B	C	D	E	F	G	H	J	K	R	O
				PIER A													
1	100	5	9'-10"	PA 501	TI	0'-5"	1'-10"	2'-8"	1'-10"	2'-8"		0'-5"					
2	4	↑	10'-2"	PA 502	↑	↑	2'-3"	2'-5"	2'-3"	2'-5"		↑					
3	↑		10'-4"	PA 503			↑	2'-6"	↑	2'-6"							
4			10'-8"	PA 504				2'-8"		2'-8"							
5			10'-10"	PA 505				2'-9"		2'-9"							
6			11'-2"	PA 506				2'-11"		2'-11"							
7	4		11'-4"	PA 507	↓			3'-0"	↓	3'-0"		↓					
8	46		11'-8"	PA 508	TI	0'-5"	2'-3"	3'-2"	2'-3"	3'-2"		0'-5"					
9	6		5'-6¾"	PA 509	S10		1'-3"	3'-0¾"	1'-3"								
10	20		6'-6"	PA 510	Str.												
11	14	5	9'-6"	PA 511	↑												
12	2	6	37'-11"	PA 601													
13	40	6	61'-6"	PA 602													
14	28	9	9'-6"	PA 901													
15	48	10	27'-0"	PA 1001													
16	48	10	61'-0"	PA 1002	Str.												
17	10	11	37'-11"	PA 1101	14		6'-5½"	25'-0"	6'-5½"				0'-9"				37'-10"
18	10	11	37'-11"	PA 1102	Str.												
19																	
20																	
21																	
22																	
23				PIER B													
24	120	5	9'-10"	PB 501	TI	0'-5"	1'-10"	2'-8"	1'-10"	2'-8"		0'-5"					
25	4	↑	10'-2"	PB 502	↑	↑	2'-3"	2'-5"	2'-3"	2'-5"		↑					
26	↑		10'-4"	PB 503			↑	2'-6"	↑	2'-6"							
27			10'-8"	PB 504				2'-8"		2'-8"							
28			10'-10"	PB 505				2'-9"		2'-9"							
29			11'-2"	PB 506				2'-11"		2'-11"							
30	4		11'-4"	PB 507	↓			3'-0"	↓	3'-0"		↓					
31	46		11'-8"	PB 508	TI	0'-5"	2'-3"	3'-2"	2'-3"	3'-2"		0'-5"					
32	6		5'-6¾"	PB 509	S10		1'-3"	3'-0¾"	1'-3"								
33	28	5	11'-0"	PB 510	Str.												
34	2	6	37'-11"	PB 601	↑												
35	12	6	27'-6"	PB 602													
36	28	8	11'-0"	PB 801													
37	48	10	33'-11"	PB 1001	↑												
38	48	10	61'-0"	PB 1002	Str.												
39	10	11	37'-11"	PB 1101	14		6'-5½"	25'-0"	6'-5½"				0'-9"				37'-10"
40	10	11	37'-11"	PB 1102	Str.												
41	13	11	20'-6"	PB 1103	Str.												
42	14	11	27'-0"	PB 1104	Str.												
43																	
44																	
45																	
46																	
47				PIER C													
48	112	5	9'-10"	PC 501	TI	0'-5"	1'-10"	2'-8"	1'-10"	2'-8"		0'-5"					
49	4	↑	10'-2"	PC 502	↑	↑	2'-3"	2'-5"	2'-3"	2'-5"		↑					
50	↑		10'-4"	PC 503			↑	2'-6"	↑	2'-6"							
51			10'-8"	PC 504				2'-8"		2'-8"							
52			10'-10"	PC 505				2'-9"		2'-9"							
53			11'-2"	PC 506				2'-11"		2'-11"							
54	4		11'-4"	PC 507	↓			3'-0"	↓	3'-0"		↓					
55	46		11'-8"	PC 508	TI	0'-5"	2'-3"	3'-2"	2'-3"	3'-2"		0'-5"					
56	6		5'-6¾"	PC 509	S10		1'-3"	3'-0¾"	1'-3"								
57	28	5	11'-0"	PC 510	Str.												
58	2	6	37'-11"	PC 601	↑												
59	28	9	11'-0"	PC 901													
60	14	9	27'-6"	PC 902													
61	48	10	30'-8"	PC 1001	↑												
62	48	10	61'-0"	PC 1002	Str.												
63	10	11	37'-11"	PC 1101	14		6'-5½"	25'-0"	6'-5½"				0'-9"				37'-10"
64	10	11	37'-11"	PC 1102	Str.												
65	24	11	27'-6"	PC 1103	Str.												
66																	
67																	
68																	
69																	
70				PIER D													
71	120	5	9'-10"	PD 501	TI	0'-5"	1'-10"	2'-8"	1'-10"	2'-8"		0'-5"					
72	4	↑	10'-2"	PD 502	↑	↑	2'-3"	2'-5"	2'-3"	2'-5"		↑					
73	↑		10'-4"	PD 503			↑	2'-6"	↑	2'-6"							
74			10'-8"	PD 504				2'-8"		2'-8"							
75			10'-10"	PD 505				2'-9"		2'-9"							
76			11'-2"	PD 506				2'-11"		2'-11"							
77	4		11'-4"	PD 507	↓			3'-0"	↓	3'-0"		↓					
78	46		11'-8"	PD 508	TI	0'-5"	2'-3"	3'-2"	2'-3"	3'-2"		0'-5"					
79	6		5'-6¾"	PD 509	S10		1'-3"	3'-0¾"	1'-3"								
80	20		6'-6"	PD 510	Str.												
81	14	5	9'-6"	PD 511	Str.												
82	2	6	37'-11"	PD 601	Str.												
83	40	6	61'-6"	PD 602	Str.												
84	28	9	9'-6"	PD 901	Str.												
85	48	10	32'-10"	PD 1001	Str.												
86	48	10	61'-0"	PD 1002	Str.												
87	10	11	37'-11"	PD 1101	14		6'-5½"	25'-0"	6'-5½"				0'-9"				37'-10"
88	10	11	37'-11"	PD 1102	Str.												
89																	
90																	
91																	
92																	
93				PIER E													
94	160	5	11'-10"	PE 501	TI	0'-5"	2'-4"	3'-2"	2'-4"	3'-2"		0'-5"					
95	4	↑	10'-2"	PE 502	↑	↑	2'-3"	2'-5"	2'-3"	2'-5"		↑					
96	↑		10'-4"	PE 503			↑	2'-6"	↑	2'-6"							
97			10'-8"	PE 504				2'-8"		2'-8"							
98			10'-10"	PE 505				2'-9"		2'-9"							
99	↓		11'-2"	PE 506				2'-11"		2'-11"							
100	4		11'-4"	PE 507	↓			3'-0"	↓	3'-0"		↓					
101	46		11'-8"	PE 508	TI	0'-5"	2'-3"	3'-2"	2'-3"	3'-2"		0'-5"					
102	6		5'-6¾"	PE 509	S10		1'-3"	3'-0¾"	1'-3"								
103	16	↓	10'-6"	PE 510	Str.												
104	22	5	7'-6"	PE 511	↑												
105	2	6	37'-11"	PE 601													
106	40	6	71'-6"	PE 602													
107	32	9	10'-6"	PE 901	Str.												
108	10	11	37'-11"	PE 1101	14		6'-5½"	25'-0"	6'-5½"				0'-9"				37'-10"
109	10	11	37'-11"	PE 1102	Str.												
110	56	11	43'-0"	PE 1103	Str.												
111	56	11	6'-3"	PE 1104	Str.												
112																	
113																	
114																	
115																	
116																	
117				PIER F													
118	108	5	9'-10"	PF 501	TI	0'-5"	1'-10"	2'-8"	1'-10"	2'-8"		0'-5"					
119	4	↑	10'-2"	PF 502	↑	↑	2'-3"	2'-5"	2'-3"	2'-5"		↑					
120	↑		10'-4"	PF 503			↑	2'-6"	↑	2'-6"							
121			10'-8"	PF 504				2'-8"		2'-8"							
122			10'-10"	PF 505				2'-9"		2'-9"							
123			11'-2"	PF 506				2'-11"		2'-11"							
124	4		11'-4"	PF 507	↓			3'-0"	↓	3'-0"		↓					
125	46		11'-8"	PF 508	TI	0'-5"	2'-3"	3'-2"	2'-3"	3'-2"		0'-5"					
126	6	↓	5'-6¾"	PF 509	S10		1'-3"	3'-0¾"	1'-3"								
127	28	5	11'-0"	PF 510	Str.												
128	2	6	37'-11"	PF 601	↑												
129	28	9	11'-0"	PF 901													
130	14	9	27'-6"	PF 902													
131	48	10	30'-11"	PF 1001													
132	48	10	61'-0"	PF 1002	Str.												
133	10	11	37'-11"	PF 1101	14		6'-5½"	25'-0"	6'-5½"				0'-9"				37'-10"
134	10	11	37'-11"	PF 1102	Str.												
135	23	11	27'-3"	PF 1103	Str.												
136																	
137																	
138																	
139																	
140				DECK													
141	304	4	27'-1"	S 401	Str.												
142	608	4	35'-6"	S 402	Str.												
143	304	4	36'-3"	S 403	Str.												
144	1056	5	4'-1"	S 501	S5		1'-4"	0'-8"	1'-4"			0'-9"					
145	1056	5	6'-1"	S 502	S5	0'-9"	1'-3"	2'-1"	1'-3"			0'-9"					
146	96	5	3'-0"	S 503	Str.												
147	430	6	41'-3"	S 601	15		4'-4"	0'-8½"	4'-3½"	3'-3"	4'-4"		0'-5½"				39'-2"
148	876	6	39'-2"	S 602	Str.												
149	120	5	6'-0"	S 504	Str												
150																	
151																	
152																	
153																	
154																	
155				APPROACH SLABS													
156	88	4	34'-8"	AS 401	Str.												
157	504	7	141'-8"	AS 701	Str.												
158																	
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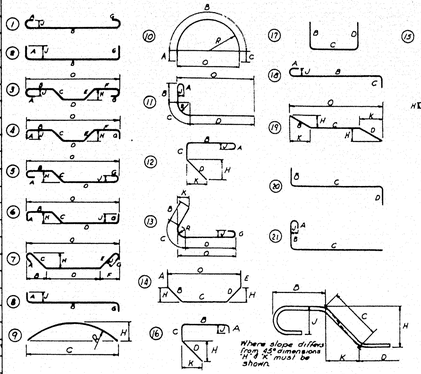
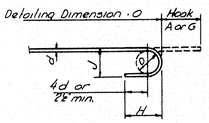
TYPICAL BAR BENDS



ENLARGED VIEW SHOWING BAR BENDING DETAILS

NOTES

1. All dimensions are out to out of bar.
2. 'J' dimensions on 180° hooks to be shown only where necessary to restrict hook size, otherwise standard hooks are to be used.
3. Where 'J' is not shown, 'J' will be kept equal to or less than 'H'. Where 'J' can exceed 'H', it should be shown.
4. 'H' dimension on stirrups to be shown where necessary to restrict hooks.
5. Where bars are to be bent more accurately than standard bending tolerances, bending dimensions which require closer marking should have limits indicated.
6. Figures in circles show types.
7. No allowance for bend curvature is to be made except for standard hook & radii in excess of same.



STANDARD HOOK DETAIL

BAR SIZES

Equivalent Size	Present (Numbers)
1/4"ϕ	#2
3/8"ϕ	#3
1/2"ϕ	#4
5/8"ϕ	#5
3/4"ϕ	#6
7/8"ϕ	#7
1"ϕ	#8
1"□	#9
1 1/8"□	#10
1 1/4"□	#11

8. Bar reinforcement metal shall conform to the requirements of the Standard Specifications for new Billet-Steel Concrete Reinforcement Bars (Intermediate Grade) Serial Designation AASHO M31-48 or its latest revision. All bars shall be deformed to conform with A.S.T.M. Specifications A 305-49.

THE CLARKESON ENGINEERING CO. INC.

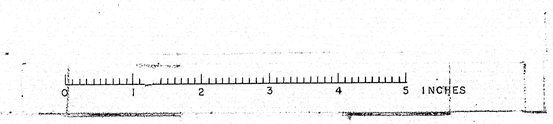
DESIGN H.L.	CHECK G.B.	BRIDGE NO.
DRAWN J.S.	APPROVED W.A.H.-C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MAINE CENTRAL R.R.
& COUNTY ROAD
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
REINFORCING SCHEDULE

SHEET 6 OF 6 SHEETS AUGUSTA, MAINE

75-125



B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)123	1	32

STATE OF MAINE
STATE HIGHWAY COMMISSION

PLANS

WATERVILLE

KENNEBEC COUNTY

MAINE FEDERAL AID INTERSTATE #95

PROJECT NO. I-95-6(23)123 PART 2

TOTAL LENGTH 0.194 MILES

SCALES
- PLAN — 1 IN. = 50 FT.
- PROFILE — HOR 1 IN. = 50 FT.; VER 1 IN. = 5 FT.
- CROSS SECTIONS — 1 IN. = 10 FT.

INTERSTATE#95 BRIDGE OVER MESSALONSKEE STREAM
AND QUARRY ROAD RELOCATION

INDEX OF SHEETS

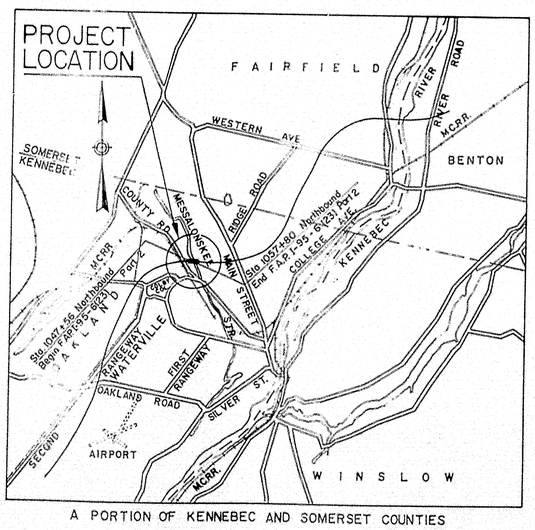
SHEET NO.		
1	TITLE SHEET	
2	TYPICAL SECTIONS	
3	QUANTITIES	
4	GENERAL PLAN	STA. 1036+00 to STA. 1052+00
5	PROFILE	STA. 1037+00 to STA. 1053+00
6	GENERAL PLAN	STA. 1051+00 to STA. 1067+00
7	PROFILE	STA. 1052+00 to STA. 1068+00
8-30	BRIDGE SHEETS	
31-32	CROSS SECTIONS	

CONVENTIONAL SIGNS

STATE OR NATIONAL LINE		SURVEY LINE	
COUNTY LINE		CULVERT	
TOWN LINE		DROP INLET	
UNFENCED PROPERTY		TROLLEY POLE	
FENCE		POWER POLE	
RIGHT OF WAY LINE		TEL. POLE	
TRAVELED WAY		MARSH	
RAILROAD		TREES	
RETAINING WALL		STONE WALL	

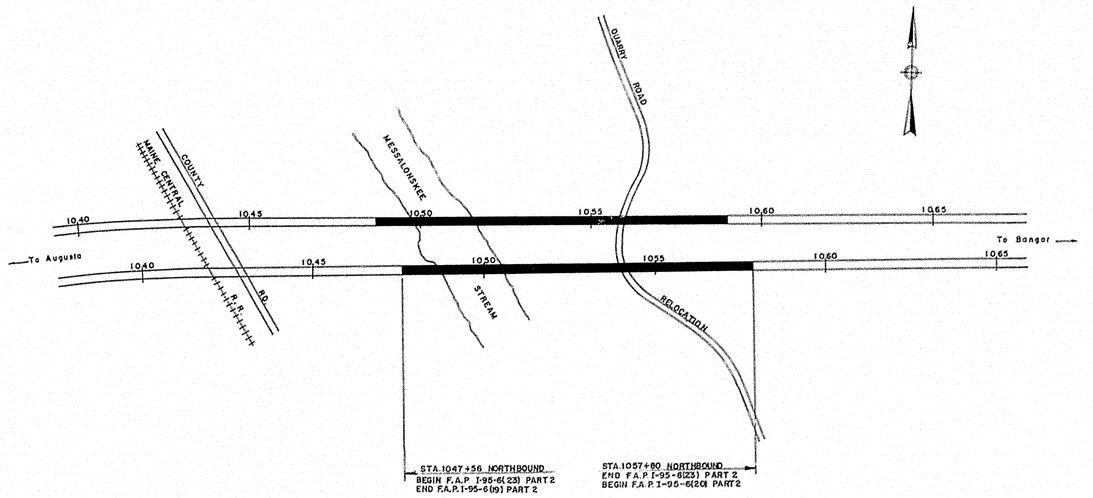
Interstate 95 shall be constructed to Top of Gravel Base only, within the Limits indicated on the Plans. Construction of Messalonskee Stream Bridge is included in this Contract.
Other Concurrent Contracts within the Limits of this Project are:
F.A.P. I-95-6(19) Part 2 and
F.A.P. I-95-6(20)

All work contemplated under this Contract to be Governed by and in conformity with the Standard Specifications, Highways and Bridges, Revision of Jan. 1956, except as modified on these Plans and by the Special Provisions.



A PORTION OF KENNEBEC AND SOMERSET COUNTIES

APPROX. SCALE IIN = I MILE



LAYOUT PLAN

SCALE 1" = 200'

AS-BUILT
1961

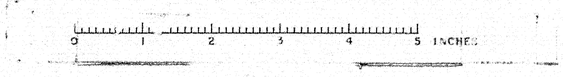
A.D.T.(1960)	=	7050
A.D.T.(1980)	=	9620
D.H.V.(1980)	=	1443
D.(1980)	=	65 %
T.(1980)	=	15 %
V.(M.P.H)	=	60

CONSULTING ENGINEERS
THE CLARKESON ENGINEERING COMPANY, INC.
BOSTON MASS.
CONSULTING ENGINEER — DATE Jan 16, 1959

APPROVED:
MAINE STATE HIGHWAY COMMISSION
David H. Stevens CHAIRMAN
Eugene P. Faubert
R. Leon Williams
Guy Cummings CHIEF ENGINEER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
REGION 1
APPROVED:
DIVISION ENGINEER — DATE

78-166

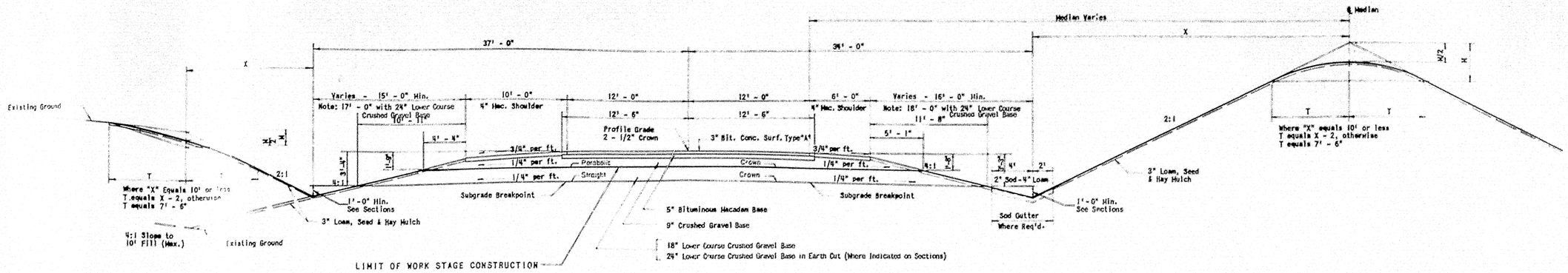


S. P. R. REG. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	2	32

WATERVILLE INTERSTATE

GRADING CONTRACT — STAGE CONSTRUCTION

INTERSTATE #95 TO BE CONSTRUCTED TO TOP OF LOWER COURSE CRUSHED GRAVEL BASE ONLY UNLESS OTHERWISE INDICATED



10' PAVED SHOULDER	CY/100 L.F.
4" Bituminous Macadam Surface	12.19
Crushed Gravel Base (to 4:1 Slope)	36.33
18" Lower Course Crushed Gravel Base	91.92
24" Lower Course Crushed Gravel Base	130.64

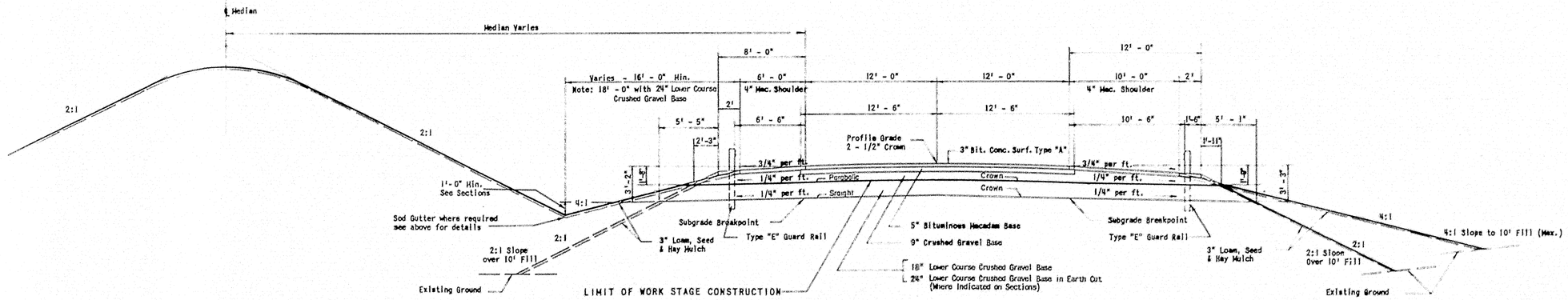
TYPICAL SECTION - NORMAL

Scale: 1" = 5'

SOUTHBOUND INTERSTATE

24' PAVEMENT	CY/100 L.F.
3" Bituminous Concrete Surface	22.22
5" Bituminous Macadam Base (25' Wide)	38.58
9" Crushed Gravel Base	66.67
18" Lower Course Crushed Gravel Base	136.42
24" Lower Course Crushed Gravel Base	180.87

8' PAVED SHOULDER	CY/100 L.F.
4" Bituminous Macadam Surface	7.25
Crushed Gravel Base (to 4:1 Slope)	27.46
18" Lower Course Crushed Gravel Base	73.74
24" Lower Course Crushed Gravel Base	106.40



8' PAVED SHOULDER	CY/100 L.F.
4" Bituminous Macadam Surface	9.72
Crushed Gravel Base (to 2:1 Slope)	29.23
18" Lower Course Crushed Gravel Base	62.80

TYPICAL SECTION - NORMAL

Scale: 1" = 5'

NORTHBOUND INTERSTATE

12' PAVED SHOULDER	CY/100 L.F.
4" Bituminous Macadam Surface	14.66
Crushed Gravel Base (to 2:1 Slope)	38.14
18" Lower Course Crushed Gravel Base	83.09

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

TYPICAL SECTIONS

THE CLARKESON ENGINEERING CO., INC.
CONSULTING ENGINEERS
BOSTON MASSACHUSETTS

78-167

0 1 2 3 4 5 INCHES

R.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	3	32

FINAL QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201-5	Clearing	2.936	Acre
204-12	Structural Earth Excavation - Abutments & Retaining Walls	706	C.Y.
204-18	Structural Earth Excavation - Piers	6971	C.Y.
205-8	Common Borrow	6892	C.Y.
205-9	Granular Borrow	15,231	C.Y.
302-7	Gravel Base Course - In Place Measurement	1896	C.Y.
304-5	Overhaul - In Place Measure	5006	Yd. Mi.
304-6	Overhaul - Pit Measure	19756	Yd. Mi.
306-5	Stripping Pits	NONE	C.Y.
501-35	Portland Cement Concrete - Abutments & Retaining Walls	524.44	C.Y.
501-36	Portland Cement Concrete - Piers	1,134.31	C.Y.
501-41	Portland Cement Concrete - Roadway & Sidewalk Slabs on Steel Bridges	2162.53	C.Y.
501-47	Portland Cement	10,255	Bbls.
502-10.1	Structural Steel - Fabricated & Delivered	3,413,214	Lbs.
502-10.2	Structural Steel- Erection	3,413,214	Lbs.
504-5	Bronze or Copper - Alloy Bearing & Expansion Plates - Delivered	4366	Lbs.
504-6	Bronze or Copper - Alloy Bearing & Expansion Plates - Placing	4366	Lbs.
509-12	Reinforcing Steel - Delivered	1,192,685	Lbs.
509-13	Reinforcing Steel - Placing	1,192,685	Lbs.
512-10	Steel H-Beam Piles 42 Lbs./Foot	18,166.7	L.F.
512-11	Steel H-Beam Piles 53 Lbs./Foot	31,953.6	L.F.
512-12	Steel H-Beam Piles 73 Lbs./Foot	15,902.5	L.F.
512-13	Steel H-Beam Piles 89 Lbs./Foot	6,483.7	L.F.
516-5	Bridge Drainage	1	L.S.
518-5	Shear Connectors - Delivered & Placed	1	L.S.
804-6	French Drains	234	C.Y.
867-15	Aluminum Railing	4,190.1	L.F.
906-18	Fencing - Metal Posts	1028	L.F.
907-9	Plain Riprap	12,760	C.Y.
907-10	Hand Laid Riprap	1,335.6	C.Y.
908-0	Loam Borrow	1721	C.Y.
910-10	Seeding - Parkway Mixture	314.3	Units
912-6	Hay Mulch	19.28	Ton
915-6	Project Markers	NONE	Each
915-8	Right of Way Monuments	6	Each
[illegible]	SODDING FWOP	1506	S.Y.
[illegible]	REMIX SEAL FWOP	500	S.Y.
[illegible]	SPECIAL BACKFILL	1471	C.Y.
[illegible]	REMIX SEAL PIER	518	C.Y.
[illegible]	WELLPOINTS PIER 2	30,573.75	L.S.
[illegible]	ELECTRONIC TRAFFIC C[illegible]	1,964	S.Y.
[illegible]	LIGHT TOWER - CUTTER	2[illegible]	S.Y.
[illegible]	SHEETING, PIER 1	23,241.61	L.S.
[illegible]	PILE DRIVING PIER 1	5,256.00	L.S.
[illegible]	WELLPOINTS AB	15,269.99	L.S.

CLEARING

STATION TO STATION	SIDE	REMARKS
Northbound		
1050 + 15 to 1052 + 10	Lt.	
1050 + 80 to 1052 + 30	Rt.	
Southbound		
1051 + 50 to 1054 + 00	Lt.	
1052 + 00 to 1053 + 55	Rt.	

RIGHT-OF-WAY MONUMENTS

STATION	LEFT	RIGHT	NO.	REMARKS
Northbound				
1051 + 50		100.00'	1	
1053 + 50		100.00'	1	
1055+40		223'	1	
Southbound				
1052 + 00	100.00'		1	
1055 + 25	100.00'		1	
1048 + 50	150.00'		1	RESET

FENCING - METAL POSTS

STATION TO STATION	SIDE	LENGTH	REMARKS
Northbound			
1047+50 To 1049+36	Rt.	186	
Southbound			
1048+10 To 1049+10	Lt.	70	
Northbound 1057+50±	Rt.		
to Southbound 1057+07±	Lt.	772	

GRAVEL BASE COURSE

STATION TO STATION	DESCRIPTION
Northbound	
1046 + 25 to 1047 + 56	18" Crushed Gravel
1057 + 80 to 1059 + 50	*
Southbound	
1047 + 25 to 1048 + 66	*
1058 + 90 to 1060 + 50	*

SUMMARY OF CLASSIFIED EXCAVATION AND BORROW

Total Earth Embankment from Cross Sections	9,537 C.Y.
20% Granular Borrow	1,907 C.Y.
Common Borrow	7,630 C.Y.
Total Common Borrow 7630 + 70*	7,700 C.Y.
Total Granular Borrow 1907 + 03*	1,900 C.Y.

* Undetermined Origin

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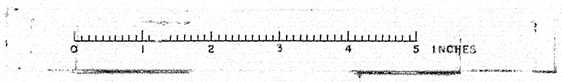

B. P. R. REG NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)	4	32

WATERVILLE INTERSTATE

MAINE CENTRAL R.R.

MESSALONSKEE STREAM

COUNTY ROAD

N-634 500 — E-632 250 — E-632 500 — E-632 750 — E-633 000 — E-633 250 — E-633 500

N-634 250 — N-634 000 — N-633 750 — N-633 500

SEE SHEET

Construction Survey
Southbound
P.I. Sta. 1038+68
Δ = 6°-[illegible]
Δc = [illegible]
Dc = [illegible]
Lc = 4[illegible]
Tc = 2[illegible]
Rc = 3[illegible]
Es = 7[illegible]
Δs = [illegible]
Ls = [illegible]
Xs = [illegible]
Ys = [illegible]
Ts = 26[illegible]
Full Super[illegible]
Sta. 999[illegible] to 1038+50

Construction Survey
Northbound
P.I. Sta. [illegible]8.93
Δ = 6[illegible]09"
Δc = 6[illegible]09"
Dc = [illegible]00"
Lc = 42[illegible]
Tc = 23[illegible]
Rc = 38[illegible]
Es = 7[illegible]
Δs = [illegible]00"
Ls = [illegible]
Xs = [illegible]
Ys = [illegible]
Ts = 26[illegible]
Full Super[illegible]
Sta. 997[illegible] to 1039+50

STA. 1042+75 SOUTHBOUND
LIMIT OF WORK
(By Others)

STA. 1044+20 SOUTHBOUND
LIMIT OF WORK
(By Others)

STA. 1047+00 SOUTHBOUND
LIMIT OF WORK

STA. 1050+50 SOUTHBOUND
LIMIT OF WORK
(By Others)

1042+96 to 1043+08 RI
20' x 2' Ditch of Hand Laid Riprap
Min. Depth 9"

C.S. 1041+64.64

S.T. 1041+64.64

C.S. 1039+64.64

S.T. 1043+16.22

C.S. 1041+16.22

R/W

100'

150'

Clearing Pay Line

Grade to Drain

Approx. Location of Temporary Railroad Grade Crossing

SOUTHBOUND INTERSTATE #95
N 88°-28'-52" E
3418.65'

NORTHBOUND INTERSTATE #95
N 88°-02'-01" E
3627.52'

STA. 1041+22 NORTHBOUND
END F.A.P. I-95-6(19) PART 1
(By Others)

280' x 2' Ditch of Hand Laid Riprap
Min. Depth 1'
1039+30 to 1042+05 RI

STA. 1041+70 NORTHBOUND
LIMIT OF WORK
(By Others)

STA. 1041+22 NORTHBOUND
BEGIN F.A.P. I-95-6(23) PART 1
(By Others)

STA. 1043+87 NORTHBOUND
END F.A.P. I-95-6(23) PART 1
(By Others)

STA. 1043+87 NORTHBOUND
BEGIN F.A.P. I-95-6(19) PART 2
(By Others)

STA. 1043+10 NORTHBOUND
LIMIT OF WORK
(By Others)

STA. 1046+00 NORTHBOUND
LIMIT OF WORK

STA. 1047+56 NORTHBOUND
END F.A.P. I-95-6(19) PART 2
(By Others)

STA. 1047+56 NORTHBOUND
BEGIN F.A.P. I-95-6(23) PART 2

STA. 1049+50 NORTHBOUND
LIMIT OF WORK
(By Others)

END FENCE

Existing Metal Posts

Fencing Both Sides

72" CMP

8" Pipe

0 1 2 3 4 5 INCHES

Photogrammetric Map by LOCKWOOD, KESSLER & BARTLETT, INC. Syosset, New York
Date of Photography 11-11-57

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B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I - 95-6(23)	5	32

WATERVILLE INTERSTATE

STA 1042+75 SOUTHBOUND
LIMIT OF WORK
(By Others)

STA 1043+10 NORTHBOUND
LIMIT OF WORK (By Others)

STA 1041+70 NORTHBOUND
LIMIT OF WORK
(By Others)

STA 1041+22 NORTHBOUND
END F.A.P. I-95-6(19) PART 1
(By Others)

STA. 1043+87 NORTHBOUND
BEGIN F.A.P. I-95-6(19) PART 2 (By Others)

STA. 1044+20 SOUTHBOUND
LIMIT OF WORK (By Others)

STA. 1047+56 NORTHBOUND
END F.A.P. I-95-6(19) PART 2
(By Others)

STA. 1047+56 NORTHBOUND
BEGIN F.A.P. I-95-6(23) PART 2

STA. 1050+50 SOUTHBOUND
LIMIT OF WORK
(By Others)

STA 1049+50 NORTHBOUND
LIMIT OF WORK
(By Others)

STA. 1041+22 NORTHBOUND
BEGIN F.A.P. I-95-6(23) PART 1
(By Others)

STA. 1043+87 SOUTHBOUND
END F.A.P. I-95-6(23) PART 1
(By Others)

V.C. = 1200'

V.C. = 1200'

Southbound H.L.S.D. = 850± d = 8.38' C = 42"

Northbound H.L.S.D. = 950± d = 7.74' C = 46"

Finished Grade Southbound
Finished Grade Northbound

Existing Ground Southbound
Existing Ground Northbound

2.16%

-2.09%

Construct to top of 18" Gravel Base only

Finished Grade Southbound
Finished Grade Northbound

Construct to top of 18" Gravel Base only

STA. 1047+00 SOUTHBOUND
LIMIT OF WORK

STA. 1046+00 NORTHBOUND
LIMIT OF WORK

P.V.I. Sta. 1052+50
152.09
Southbound

P.V.I. Sta. 1053+25
152.27
Northbound

Existing Ground Southbound
Existing Ground Northbound

Messalonskee Stream

	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053
Existing Grade																	
Finished Grade																	
Southbound	190.0 / 185.09	188.3 / 183.00	182.7 / 180.91	178.8 / 178.82	174.0 / 176.73	162.0 / 174.64	146.0 / 172.35	146.0 / 170.46	130.0 / 168.37	130.0 / 166.28	128.3 / 164.24	123.3 / 162.62	118.3 / 161.46	93.0 / 160.77	90.7 / 160.54	95.0 / 160.79	100.7 / 161.49
Northbound	191.4 / 182.05	185.0 / 179.89	178.6 / 177.73	165.0 / 175.57	153.0 / 173.41	144.0 / 171.25	140.0 / 169.09	131.1 / 166.93	127.9 / 164.77	109.2 / 162.73	104.2 / 161.11	107.9 / 159.92	85.6 / 159.15	92.2 / 158.82	95.5 / 158.96	108.2 / 159.45	119.- / 160.40

INTERSTATE #95 (WATERVILLE INTERSTATE)

78-170

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	6	32

WATERVILLE INTERSTATE

N-634 500 E-633 000 N-634 250 E-633 250 N-633 750

Limit of Work Meet Existing Sta 44+50 By others

46+34 36"x16'ACCMP Lt w/Metal Endwall 36"x28'R.C.P. Roadway 36"x16'A.C.C.M.P.R.T. Pipe Connector Rt

LEWIS J. ROSENTHAL

Δ: 37°57'47" D: 28°38'52" T: 68.79' L: 132.52' E: 11.50' R: 200'

Remove Exist. 12"CMP

Fencing Metal Posts

46+34 Lt Quarry Rd to 1060+90 Lt S.B. 430'x2' Ditch (Sodded)

1060+90 To 1061+23 40'x2' Ditch of Hand Laid Riprap

CHARLES E. & MILORED VIGUE

1064+75 to 1069+00 430'± Top of Slope Ditch

Berm Elev. 135± Grade to Drain

Berm Elev. 150± Grade to Drain Remove Existing 36" Boiler Plate Pipe

Berm Elev. Varies 150± to 160±

Berm Elev. 160± Grade to Drain

1061+05 to 1062+50 175'x2' Ditch (Sodded)

1062+50 to 1063+00 50'x2' Ditch (Sodded)

1063+00 to 1064+75 175'x2' Ditch (Sodded)

1063+00 30"x20' ACCMP Lt w/Metal Endwall 30"x68' RCP Roadway 30"x20' ACCMP Rt. Pipe Connector Rt.

Sta 1055+00 Southbound Limit of Work

Δ: 22°05'12" D: 28°38'52" T: 39.04' L: 77.10' E: 3.77' R: 200'

Line of Improvement

SOUTHBOUND INTERSTATE #95

STA. 1061+00 SOUTHBOUND LIMIT OF WORK

1060+20 to 1061+75 100'x2' Ditch (Sodded)

1063+00 Rt. S.B. to 1061+15 Lt. N.B. 38'x2' Ditch of Hand Laid Riprap

1065+05 Rt. S.B. to 1062+25 Lt. N.B. 105'x2' Ditch (Sodded)

1061+75 to 1062+40 15'x2' Ditch (Sodded)

Sta 1054+09.95 Northbound Interstate #95

Sta 50+00.00 Quarry Road Relocation

Pt. 49454.15

Pt. 49454.16

Sta 1055+79.62 Southbound Interstate #95

Sta 48+62.49 Quarry Road Relocation

Pt. 49439

N 88° 28' 52" E 341.85'

N 88° 28' 52" E 362.52'

NORTHBOUND INTERSTATE #95

STA. 1060+00 NORTHBOUND LIMIT OF WORK

STA. 1057+80 NORTHBOUND END F.A.P.I-95-6(23)PART 2

Sta 1057+80 Northbound Begin F.A.P. I-95-6 (20) BY OTHERS

1061+15 30"x10' ACCMP w/Metal Endwall 30"x72' RCP Roadway 30"x12' ACCMP Rt. Hand laid Riprap at Outlet

1061+15 to 1062+50 144'x2' Ditch (Sodded)

Line of Improvement

Fencing - Metal Posts

52+40 Lt to 53+80 Lt 140'x2' Sodded Ditch

QUARRY ROAD 3 33'-33"E 32 RELOCATION 33

Remove Exist. 12"CMP

1061+00 to 1061+15 20'x2' Ditch of Hand Laid Riprap

ROLAND WARE

20" Water Main

EXISTING EASEMENT FOR KENNEBEC WATER DISTRICT

NOTE. SEE SHEET #7 FOR RELOCATION DETAIL OF K.W.D. 20" WATER MAIN

53+89 Lt Quarry Rd to 1061+00 Rt. N.B. 435'x2' Ditch (Sodded)

Δ: 35°31'30" D: 28°38'52" T: 64.07' L: 124.01' E: 10.01' R: 200'

53+09 36"x10'ACCM P Lt w/Metal Endwall 36"x24'R.C.P. Roadway 36"x20'A.C.C.M.P. Rt. Pipe Connector Rt.

Limit of Work Meet Existing Sta 55+50 By others

NESSALONSKEE STREAM

SEE SHEET 5

SEE SHEET 7

Photogrammetric Map by LOCKWOOD, KESSLER & BARTLETT, INC. Syosset, New York
Date of Photography 11-11-57

78-171

B.P.R. REC.NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	7	32

WATERVILLE INTERSTATE

STA. 1057+80 NORTHBOUND
END F.A.P. I-95-6(23) PART 2

Sta 1057+80 Northbound
Begin F.A.P. I-95-6(20)
By Others

STA. 1061+00 SOUTHBOUND
LIMIT OF WORK

STA. 1060+00 NORTHBOUND
LIMIT OF WORK

VC = 1200' Southbound
HLSD = 850'
d = 8.385°
C = 42"

VC = 1200' Northbound
HLSD = 950'
d = 7.74°
C = 46"

PVT Sta 1058+50
173.69
Southbound

PVT Sta 1057+25
163.27
Northbound

+3.50 %

+3.00 %

Finished Grade Northbound

Finished Grade Southbound

Grade to Drain
Berm Elev. 150±

Grade to Drain
Berm Elev 150±

Sta. 1055+50
Northbound
Limit of Work
By Others)

Grade to Drain
Berm Elev. 135±

Grade to Drain
Berm Elev 135±

Sta 1055+00
Southbound
Limit of Work
(By Others)

PVI Sta 1055+55
152.69
Southbound

Existing Ground Northbound

Existing Ground Southbound

Construct to Top of 18" Lower Course Crushed Gravel Base only

New 30" Culvert Northbound

18"-24" Lower Course Crushed Gravel Base Northbound

Finished Grade Southbound

Construct to Top of 24" Lower Course Crushed Gravel Base only Northbound

New 30" Culvert Southbound

Existing Ground Northbound

Existing Ground Southbound

18"-24" Lower Course Crushed Gravel Base Southbound

Finished Grade Northbound

Construct to Top of 24" Lower Course Crushed Gravel Base Only Southbound

Construct to Top of 18" Lower Course Crushed Gravel Base Only Northbound

24"-18" Lower Course Crushed Gravel Base Southbound

24"-18" Lower Course CrushedGravel Base Northbound

	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068
Existing Grade																
Finished Grade																
Southbound	160.79	100.7 / 161.49	122.0 / 164.29	122.0 / 166.40	120.5 / 168.96	123.4 / 172.00	132.0 / 175.44	128.0 / 176.94	144.7 / 182.44	162.9 / 185.34	171.6 / 189.44	186.0 / 192.54	193.9 / 196.44	206.2 / 199.94	213.3 / 202.44	220.7 / 206.94
Northbound	159.45	119.8 / 160.40	123.1 / 163.61	122.0 / 165.86	128.4 / 168.53	135.2 / 171.52	143.6 / 174.52	149.8 / 177.52	166.1 / 180.52	173.4 / 183.52	186.2 / 186.52	198.1 / 189.52	203.5 / 192.52	209.7 / 195.52	217.3 / 198.52	220.5 / 201.52

Sta. 1054+01.95 Northbound Interstate #95
Sta. 50+00.00 Quarry Rd. Relocation

Sta. 1055+79.62 Southbound Interstate #95
Sta 48+62.49 Quarry Rd. Relocation

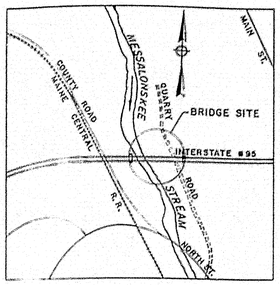
INTERSTATE #95 (WATERVILLE INTERSTATE)

78-172

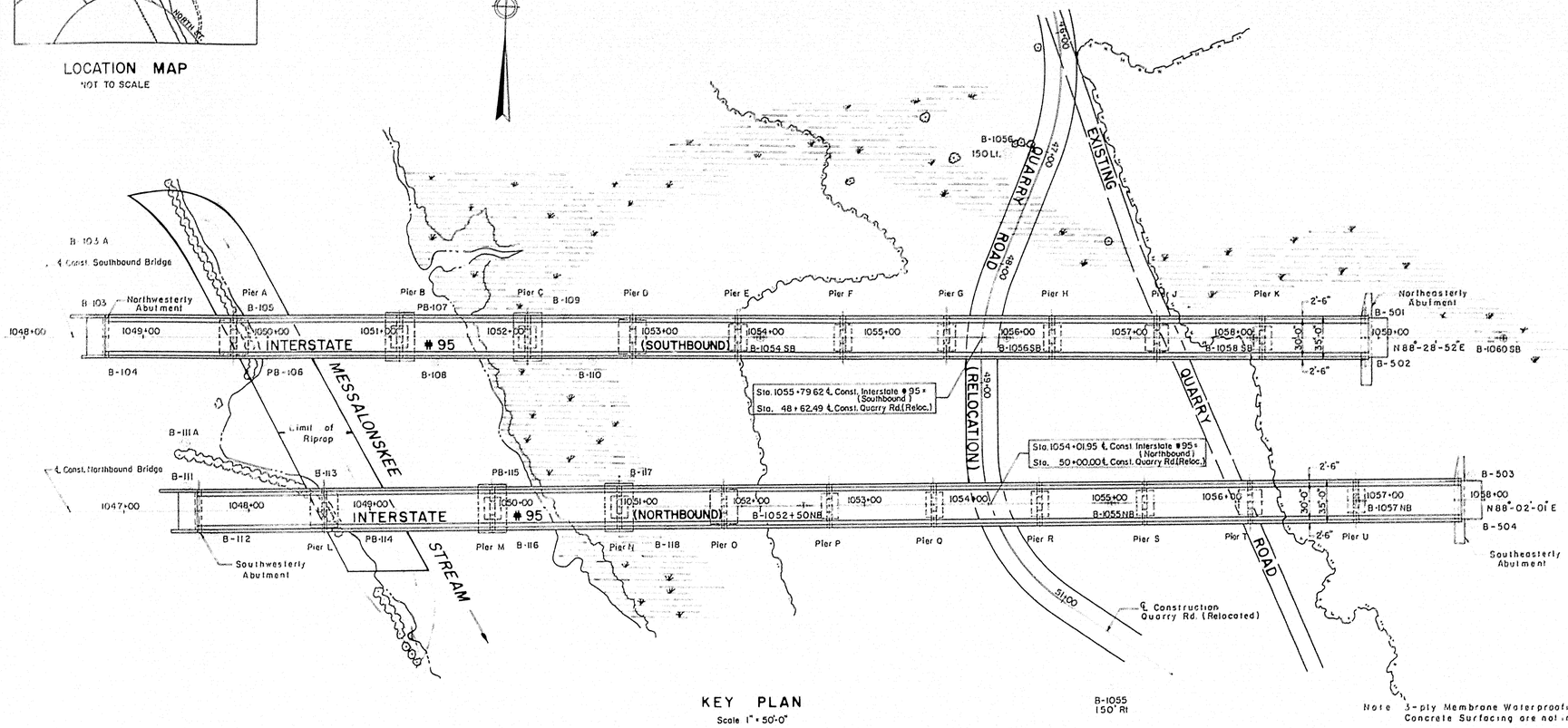
0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	8	32

WATERVILLE INTERSTATE



LOCATION MAP
NOT TO SCALE



KEY PLAN
Scale 1" = 50'-0"

GENERAL NOTES

FOUNDATION:

Foundations may be altered, if necessary, to suit conditions encountered in construction.

DESIGN:

In accordance with the Specifications of the American Association of State Highway Officials for H20-S16-44 loading (1957 Edition) and as modified for military requirements.

Design Stresses: Structural Steel f_s = 18,000 psi
Reinforcing Steel f_s = 18,000 psi
Concrete (n = 10) f_c = 1,200 psi

CONSTRUCTION:

State of Maine Standard Specifications to be followed except as noted in Special Provisions.

STRUCTURAL STEEL:

Wherever cover plates and /or shear connectors are welded to beams, beams and plates shall be Weldable Structural Steel A.S.T.M. Designation A 373

HYDRAULIC DATA:

Drainage Area 260 sq mi
Design Flood 1936
Estimated Discharge 9000 cfs
Velocity of Flow 6' /sec

BENCH MARK:

BM-47A Hinge nail (horiz.) inside of 5", one of cluster of 10 Ash trees (along river bank)
Sta. 1049+50 (N.B.) = 130' Rt.
Elevation 102.06 U.S.G.S. Datum

BM-47B Hinge nail in root of 4" White Birch.
Sta 1052+53 (S.B.) = 120' Lt.
Elevation 98.02 U.S.G.S. Datum.

BM-6 Spike & washer in N.E. root of 6" White Birch on north edge of Quarry Rd.
Sta 1057+39 (N.B.) 216' Rt.
Elevation 121.91 U.S.G.S. Datum.

DESIGN	CHECK H.	BRIDGE NO.
DRAWN E. K.	APPROVED W.E.H. - J.M.	SURVEY PLAT

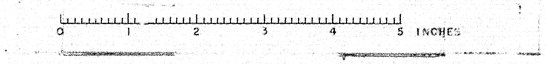
STATE HIGHWAY COMMISSION
INTERSTATE # 95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
KEY PLAN

APPROVED BY Wm. A. Henderson DATE 2-17-59

THE CLARKESON ENGINEERING CO., INC.
CONSULTING ENGINEERS
BOSTON MASSACHUSETTS

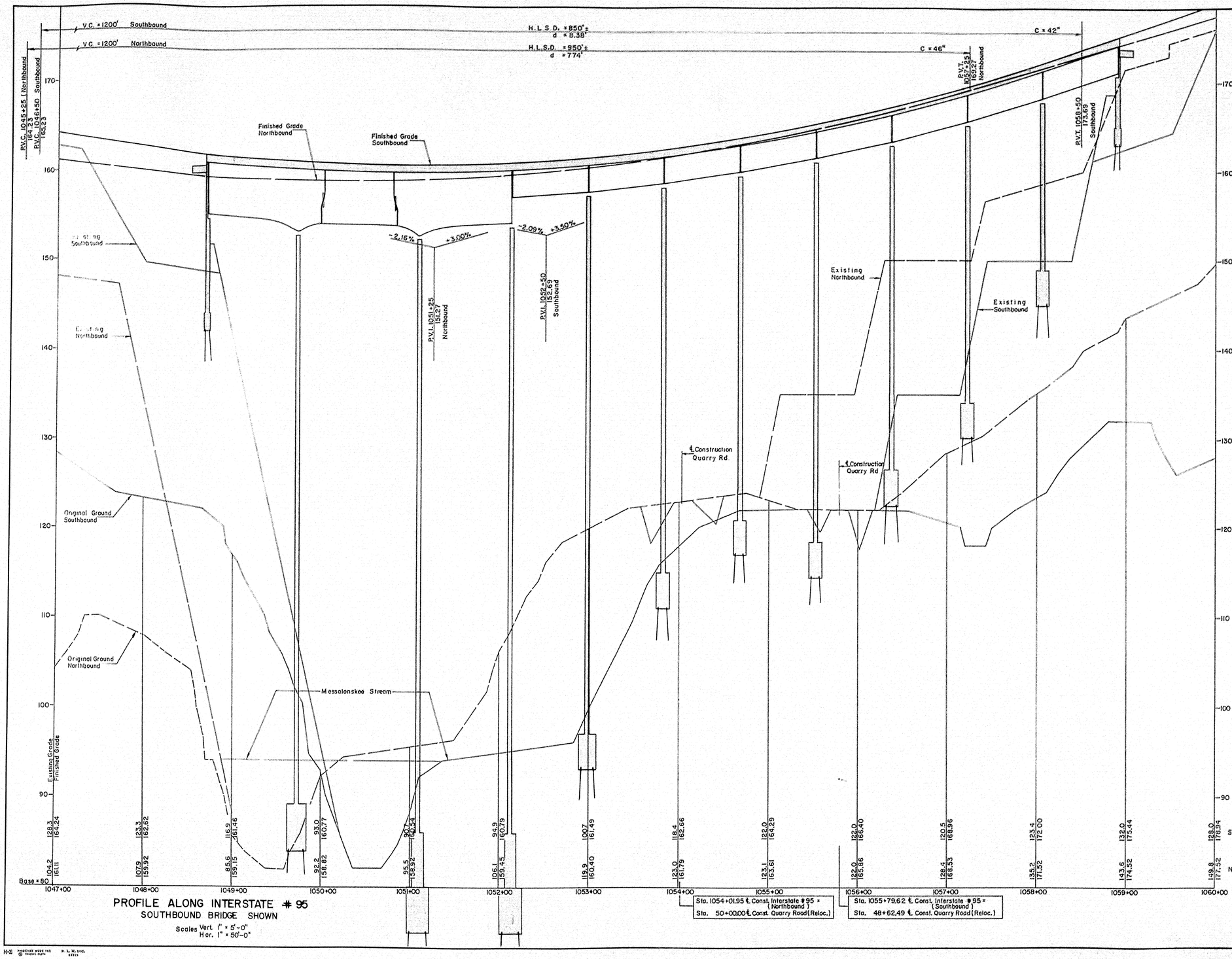
SHEET 1 OF 23 SHEETS AUGUSTA, MAINE

78-173



B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	9	32

WATERVILLE INTERSTATE



PROFILE ALONG INTERSTATE # 95
SOUTHBOUND BRIDGE SHOWN

Scales Vert. 1" = 5'-0"
Hor. 1" = 50'-0"

0 1 2 3 4 5 INCHES

THE CLARKESON ENGINEERING CO., INC.

DESIGN	CHECK H.P.	JOB NO.
DRAWN E.K.	APPROVED W.A.H.-C.J.M.	SHT. NO.

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

PROFILE

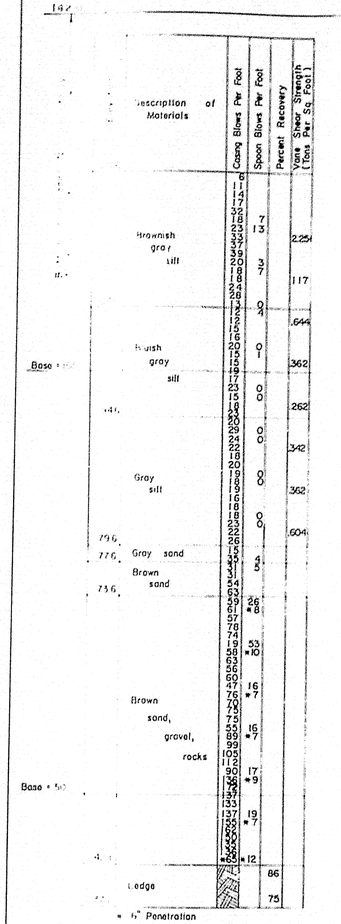
SHEET 2 OF 23 SHEETS AUGUSTA, MAINE

78-174

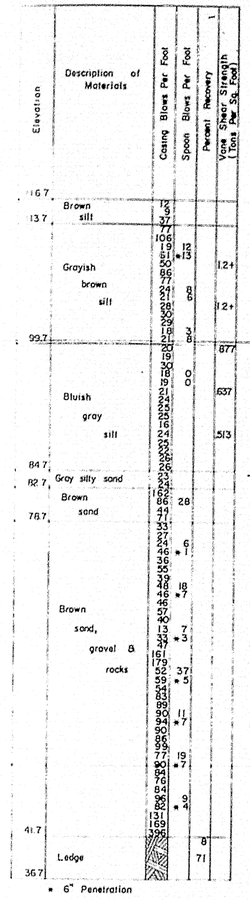
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	10	32

WATERVILLE INTERSTATE

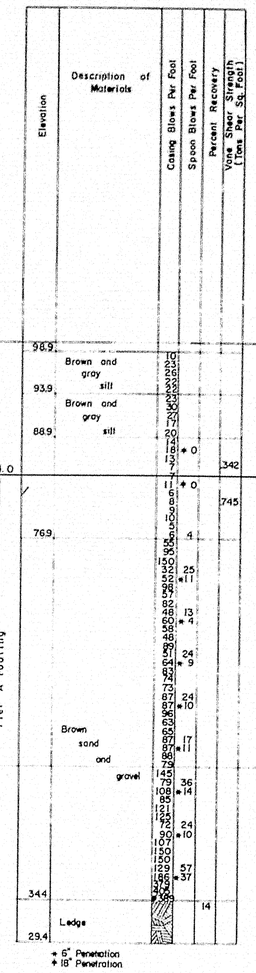
B-103



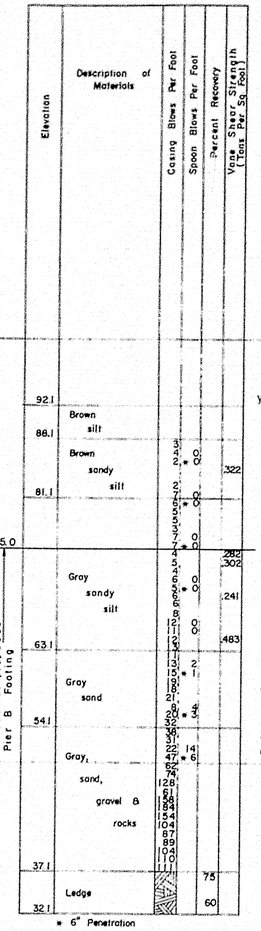
B-104



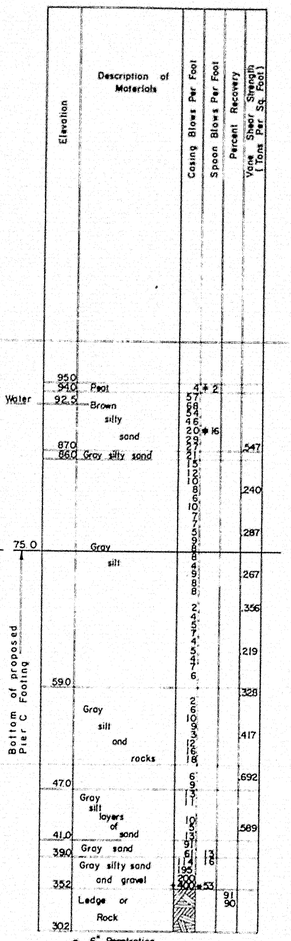
B-105



B-108



B-109



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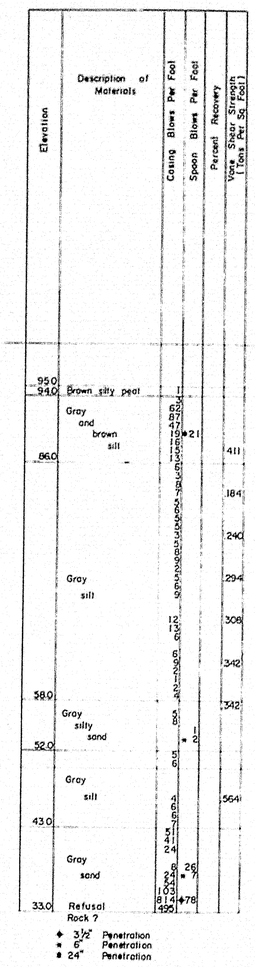
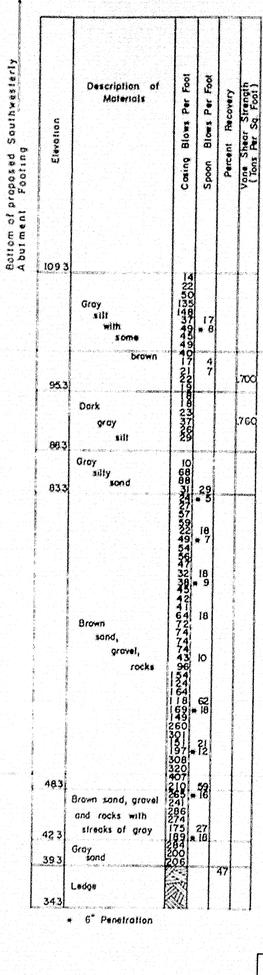
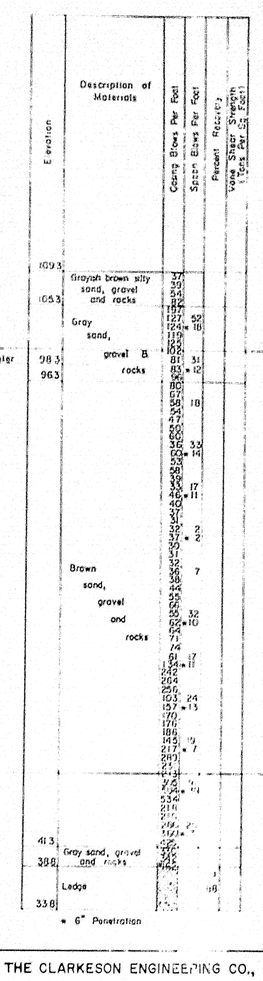


B-111



B-112

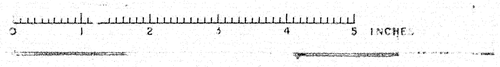


BORING LOG

Scale: ⅛" = 1'-0"

Notes:

1. Location of borings are shown on Key Plan thus ◉ B-103.
   Location of punchings are show on Key Plan thus ◉ PB-106
2. Borings are taken for purpose of design and show condition at boring points only, but do not necessarily show nature of materials to be encountered during construction.
3. Figures in boring columns indicate blows per foot on 2½" or 4" casing, sample tube, or 1⅜" spoon produced by a 310 # hammer with a fall of 16", 18", and 14" respectively.
4. Punchings made by a 1" rod and a 60 # hammer with an 18" drop.
5. Borings & Punchings were taken by the Maine State Highway Commision during the months of May, June, July and August 1958.



THE CLARKESON ENGINEERING CO., INC.

DESIGN	CHECKED	PURPOSE NO.
DRAWN E.K.	APPROVED WATERVILLE	SURVEY

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

BORING LOG

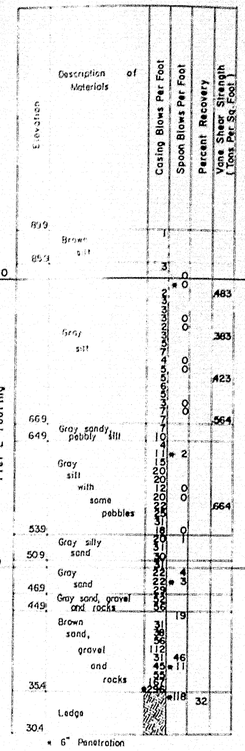
SHEET 3 OF 23 SHEETS AUGUSTA, MAINE

78-175

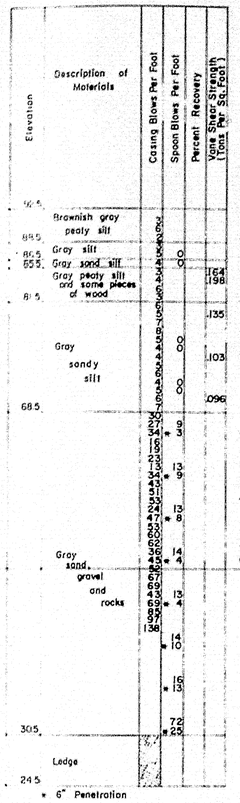
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)	11	32

WATERVILLE INTERSTATE

B-113



B-116



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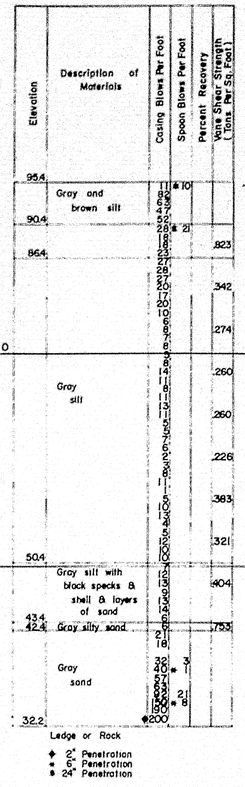

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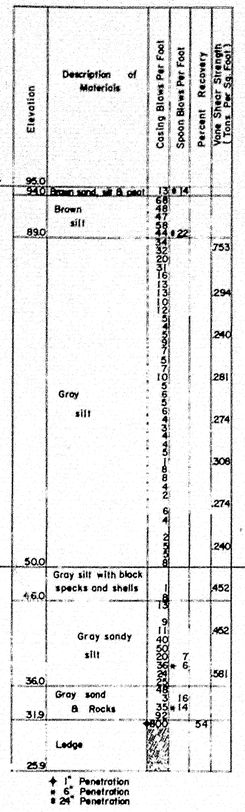


BORING LOG

Scale: 1/8" = 1'-0"

Note: For borings notes see Sheet 3.

PB-106

Elev.	Depth in Feet	No. of Blows	Remarks
93.15			Ground Elev.
			Hand
	0 - 2	23	
	2 - 3	33	
	3 - 4	40	
	4 - 5	56	
	5 - 6	53	
	6 - 7	20	
	7 - 8	31	
	8 - 9	41	
	9 - 10	27	
	10 - 11	20	
	11 - 12	18	
	12 - 13	22	
	13 - 14	23	
	14 - 15	18	
	15 - 16	21	
	16 - 17	20	
	17 - 18	30	
	18 - 19	26	
	19 - 20	31	
	20 - 21	29	
	21 - 22	43	
	22 - 23	33	
	23 - 24	43	
	24 - 25	46	
	25 - 26	46	
	26 - 27	52	
	27 - 28	44	
	28 - 29	48	
	29 - 30	50	
	30 - 31	38	
	31 - 32	58	
	32 - 33	58	
	33 - 34	58	
	34 - 35	63	
	35 - 36	64	
	36 - 37	64	
	37 - 38	59	
	38 - 39	55	
	39 - 40	60	
	40 - 41	58	
	41 - 42	58	
	42 - 43	82	
	43 - 44	80	
	44 - 45	80	
	45 - 46	90	
	46 - 47	93	
	47 - 48	107	
	48 - 49	107	
	49 - 50	107	
	50 - 51	140	
	51 - 52	138	
	52 - 53	160	
	53 - 54	152	
	54 - 55	132	
	55 - 56	134	
	56 - 56.7	139	Refusal

PB-107

Elev.	Depth in Feet	No. of Blows	Remarks
93.55			Water Elev.
92.22			Stream Bed El.
	0 - 31		Pushed Rods
	31 - 32	48	
	32 - 33	43	
	33 - 34	41	
	34 - 35	44	
	35 - 36	45	
	36 - 37	50	
	37 - 38	46	
	38 - 39	49	
	39 - 40	55	
	40 - 41	51	
	41 - 42	75	
	42 - 43	72	
	43 - 44	63	
	44 - 45	64	
	45 - 46	61	
	46 - 47	74	
	47 - 48	54	
	48 - 49	61	
	49 - 50	66	
	50 - 51	140	
	51 - 52	64	
	52 - 53	68	
	53 - 54	61	
	54 - 55	64	
	55 - 56	80	
	56 - 57	73	
	57 - 58	292	
	58 - 58.4	226	Refusal

PB-114

Elev.	Depth in Feet	No. of Blows	Remarks
94.7			Ground Elev.
			Hand
	0 - 3		
	3 - 4	27	
	4 - 5	19	
	5 - 6	17	
	6 - 7	18	
	7 - 8	24	
	8 - 9	22	
	9 - 10	20	
	10 - 11	20	
	11 - 12	16	
	12 - 13	17	
	13 - 14	18	
	14 - 15	15	
	15 - 16	20	
	16 - 17	16	
	17 - 18	14	
	18 - 19	16	
	19 - 20	21	
	20 - 21	15	
	21 - 22	15	
	22 - 23	18	
	23 - 24	19	
	24 - 25	26	
	25 - 26	21	
	26 - 27	11	
	27 - 28	25	
	28 - 29	30	
	29 - 30	24	
	30 - 31	28	
	31 - 32	28	
	32 - 33	32	
	33 - 34	38	
	34 - 35	43	
	35 - 36	39	
	36 - 37	47	
	37 - 38	43	
	38 - 39	42	
	39 - 40	57	
	40 - 41	51	
	41 - 42	54	
	42 - 43	58	
	43 - 44	66	
	44 - 45	69	
	45 - 46	56	
	46 - 47	57	
	47 - 48	90	
	48 - 49	94	
	49 - 50	85	
	50 - 51	95	
	51 - 52	95	
	52 - 53	75	
	53 - 54	77	
	54 - 55	60	
	55 - 56	47	
	56 - 57	45	
	57 - 58	48	
	58 - 59	56	
	59 - 60	58	
	60 - 61	78	
	61 - 62	68	
	62 - 63	102	
	63 - 63.2	66	Refusal
36.9			Bedrock-Refusal

Note: Bubbling well developed when rods were pulled. Hydraulic head of about 1 ft.

PB-115

Elev.	Depth in Feet	No. of Blows	Remarks
93.55			Water Elev.
92.22			Stream Bed El.
	0 - 6		Pushed Rods
	6 - 7	19	
	7 - 8	19	
	8 - 9	17	
	9 - 10	17	
	10 - 11	18	
	11 - 12	26	
	12 - 13	20	
	13 - 14	16	
	14 - 15	16	
	15 - 16	16	
	16 - 17	21	
	17 - 18	15	
	18 - 19	17	
	19 - 20	15	
	20 - 21	11	
	21 - 22	11	
	22 - 23	19	
	23 - 24	13	
	24 - 25	23	
	25 - 26	12	
	26 - 27	24	
	27 - 28	23	
	28 - 29	28	
	29 - 30	33	
	30 - 31	30	
	31 - 32	43	
	32 - 33	40	
	33 - 34	47	
	34 - 35	57	
	35 - 36	57	
	36 - 37	62	
	37 - 38	60	
	38 - 39	58	
	39 - 40	56	
	40 - 41	58	
	41 - 42	74	
	42 - 43	81	
	43 - 44	73	
	44 - 45	77	
	45 - 46	96	
	46 - 47	99	
	47 - 48	90	
	48 - 49	94	
	49 - 50	85	
	50 - 51	94	
	51 - 52	95	
	52 - 53	79	
	53 - 54	77	
	54 - 55	60	
	55 - 56	47	
	56 - 57	45	
	57 - 58	48	
	58 - 59	56	
	59 - 60	58	
	60 - 61	78	
	61 - 62	68	
	62 - 63	102	
	63 - 63.2	66	Refusal

PUNCHING LOG

Scale: 1/8" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN	CHECK GB	BRIDGE NO.
DRAWN E.K.	APPROVED WAH-CJM	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)

IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

BORING LOG

SHEET 4 OF 23 SHEETS AUGUSTA, MAINE

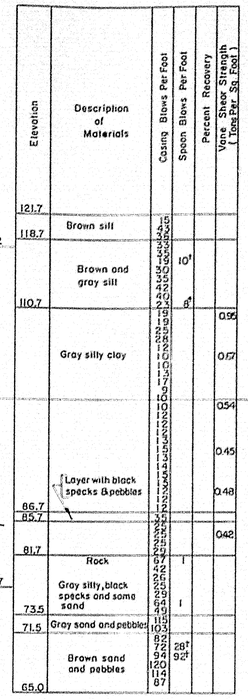
78-176

0 1 2 3 4 5 INCHES

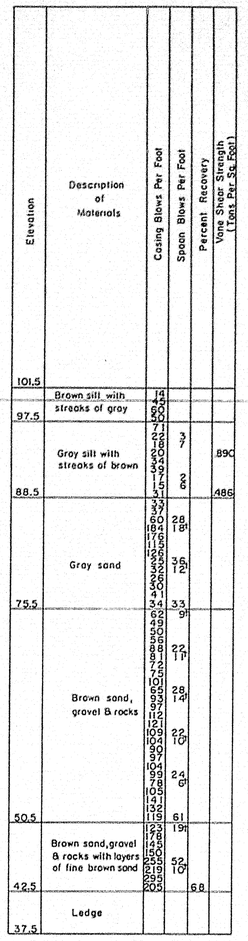
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	12	32

WATERVILLE INTERSTATE

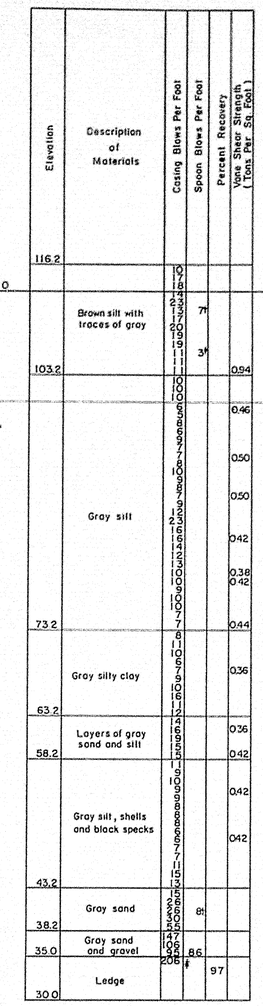
B-103 A



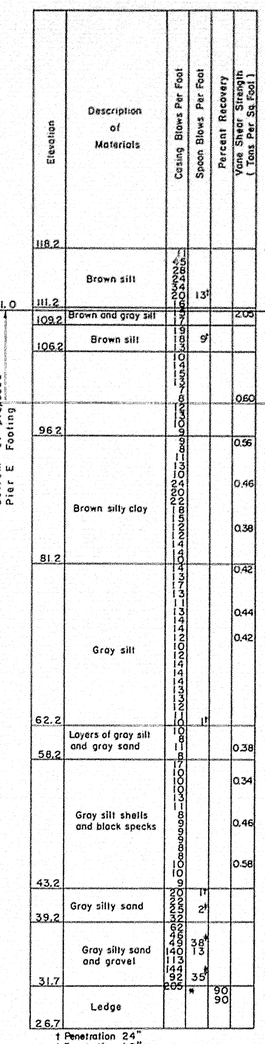
B-111 A



B-1052 + 50 NB



B-1054 SB



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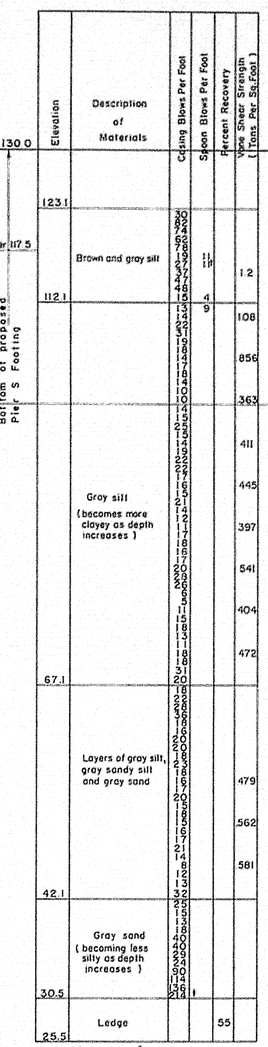

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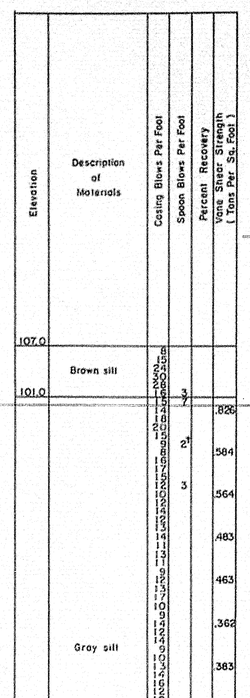
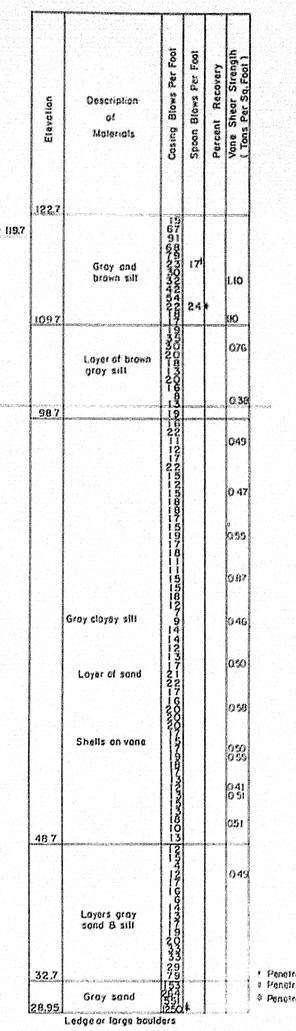


B-1056 SB



BORING LOG

Scale: 1/8" = 1'-0"

For boring notes see sheet 3.

THE CLARKESON ENGINEERING CO., INC.

DESIGN	CHECK G B	BRIDGE NO.
DRAWN E.K.	APPROVED WAH-GJM	SURVEY

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

BORING LOG

SHEET 5 OF 23 SHEETS AUGUSTA, MAINE

78-177

NOE PHOENIX BLVD 198 @ MARKET SQUARE R. L. N. INC. 03038

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	13	32

WATERVILLE INTERSTATE

B-1056 LT.

Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Vane Shear Strength (Tons Per Sq. Foot)
112.9		7		
111.9	Brown silty sand	27		
		31		
	Mostly brown	33		
		26	14	
	Brown and gray silt	16		
		20		
		18		
		17		
		15		
		11		1.0*
98.9		13		
		12		
		6		
		5		
		6		.503
	Gray silt	7		
		7		.403
		7		
		8		
		9		.342
		10	60	
		9		.342
		7	60	
		8		
72.9		11		.342
		8		
		8		
		6		
		5		.342
		7		
		4		
		4		
	Gray clayey silt	3		.403
		5		
		4		
		2		.322
		5		
		4		
		3		.302
52.9		2		
	Gray silt, sand and rocks	8	21†	
47.9		14		
		11		
		5		
	Gray silt	9		1.0
39.9		10		
		22		
	Gray sand	24		
35.9		29		
		39		
		87	25	
32.5	Gray sand & gravel	151	28	
	Ledge	200/		

† Penetration 18"
‡ Penetration 24"
/ Penetration 5"

B-1057 NB

Bottom of proposed Pier U Footing

Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Vane Shear Strength (Tons Per Sq. Foot)
145.0				
		54		
128.2		56		
	Brown silty sand	52		
123.2		50		
		34		
		37	5	
		67		
		61		
	Grayish brown sandy silt	33	35	
		28		.1062
		20		
		16		
112.2		14		
		18		.342
		12		
		11		
		9		.257
		8		
		7		
		10		
		9		.521
		9		
		8		
		14		
		17		.178
		6		
		13		
		14		
		7		.589
		7		
		10		
		11		
87.2		4		
		11		
		10		.726
		14		
	Gray grilly silt	34		
		32		.548
		20		
		11		
		22		
75.2		36		.342
		18		
		22		
		25		
		14		
		11		
		14		.822
		17		
		19		
		35		
		34		
		38		
		36		
		32		.993
		18		
		23		
		24		
	Gray sandy silt	28		
		54		
		42	22	
		36		
		45		
		67		
		83		
		97		
		32	16	
		34	18	.890
		40		
		68		
		59		
		37	33	
45.2		42	18	1.0†
		98		
		180		
41.6	Gray sand, gravel & rocks	288		
		132		

† Penetration 6"

B-1058 SB

Bottom of proposed Pier K Footing

Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Percent Recovery	Vane Shear Strength (Tons Per Sq. Foot)
145.0					
124.4		6			
	Brown silt	30			
		67			
		90			
		75	20‡		
		24			
		33			
		22			1.0‡
115.4		32			
		55			
		23	16‡		
		17			1.0‡
		40			
		32			
		20			
		20			
		12			
		19			
		24			
		29			
		15			
		20			.631
		22			
99.4		25			
		18			
		14			
		16			
		17			.356
		17			
		21			
		22			
		19			.411
		18			
		23			
		23			
		27			.329
		13			
		16			
		16			
		12			.342
		11			
		11			
		19			
	Gray clayey silt	22			
		25			.363
		18			
		24			
		20			
		21			.411
		17			
		10			
		11			
		10			.397
		10			
		8			
		10			
		7			
64.4		9			
		12			
		12			
		10			
	Layers of sand & rocks and gray silt	15			.390
		16			
		15			
		10			.521
56.4		14			
		18			
	Gray sand	22			
		35			
		30			
51.7		120	#	35	
	Ledge or boulder	200	*		
47.2					

† Penetration 18"
‡ Penetration 24"
# Penetration 8"
* Penetration 2"

B-1060 SB

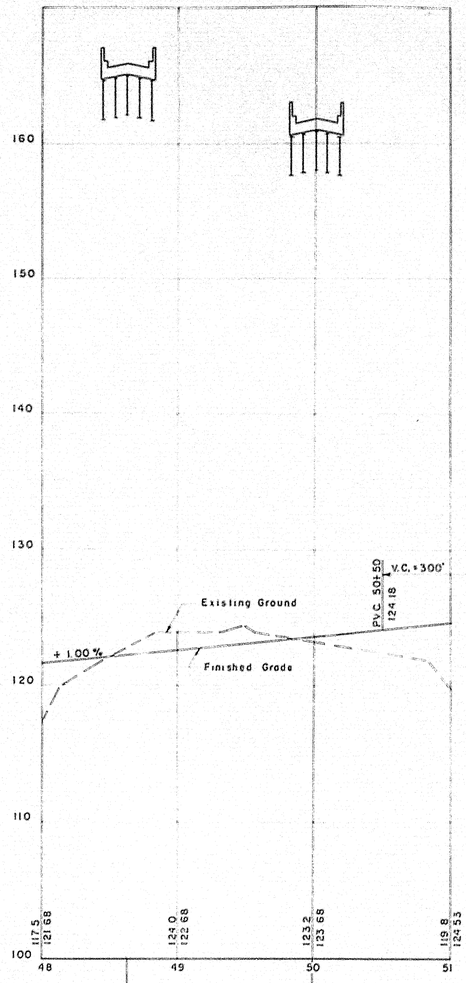
Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Vane Shear Strength (Tons Per Sq. Foot)
127.8		5		
	Brown and gray silt	4		
119.8		4		.906
116.8	Brown sandy silt	5	61	
		64		
		130		
	Brown sand and gravel	50	53	
		58		
		100		
109.8		128		
		117		
	Gray sand and gravel	89		
		37		
		79	40	
106.3	Ledge	538†		

† Penetration 15"
* Penetration 6"

BORING LOG

Scale: 1/8" = 1'-0"

For boring notes see sheet 3.



Sta. 48+62.49 Quarry Rd. Relocation
Sta. 1055+79.62 Southbound Interstate # 95

Sta 50+00.00 Quarry Rd. Relocation
Sta 1054+01.95 Northbound Interstate # 95

PROFILE ALONG QUARRY ROAD RELOCATION

Scale: 1" = 50'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN | CHECK G.B.

DRAWN E.K. | APPROVED W.A.H. C.J.M.

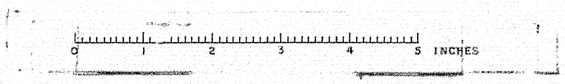
STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

BORING LOG

SHEET 6 OF 23 SHEETS AUGUSTA, MAINE

78-178



B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	14	32

WATERVILLE INTERSTATE

B-501

Bottom of proposed Northeasterly Abutment Footing — Elevation 163.5

Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Percent Recovery	Vane Shear Strength (Tons Per Sq. Ft.)
	Brown Silt	3 12 25			
Water	Gray Silt with Brown Streaks	35 17 17 35 55 35 28 28 18	12 6 3 2		1.10 .624
		21 12 15 11 16 11 7 9 15 7 9 13	0 0 0 0 0 0 0 0 0 0 0 0		.302 .282 .362
74.0		26 50 20	0 0		1.10
67.5	Brown Sand & Gravel	61 116 96 72	10 15 50		
62.5	Ledge	28		97	

* Penetration 6"

B-502

Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Percent Recovery	Vane Shear Strength (Tons Per Sq. Ft.)
132.7	Brown Silt	12 25			
127.7	Brown Silt with Gray Streak	20 22 29	18 14		
Water 123.2		13 9 6 5 7 5 7 10 7 5 7 11	0 0 0 0 0 0 0 0 0 0 0 0		.544 .624 .262 .262 .403 .564 .262
118.7	Gray Silt	7 7 10 7 7 16	0 0 0		.906 .363
55.7	Gray Silt with Layers of Sand	11 13 7 5 5 7 5 7 10 7 7 16	0 0 0 0 0 0 0 0 0 0 0 0		.926 .504 .342 .342 .362 .363 .383
76.7	Gray-Brown Sand	100			.110
75.0	Ledge			46	

* Penetration 6"

B-503

Bottom of proposed Southeasterly Abutment Footing — Elevation 159.0

Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Percent Recovery	Vane Shear Strength (Tons Per Sq. Ft.)
134.7	Brown Silt	8 25 30			
Water 129.7	Gray Silt with Brown Streaks	14 22 33	5		.411
125.7	Gray Silt	22 11 12 16 13 6 7 7 10 7 12 11	2 0 0 0 0 0 0 0 0 0 0 0		.411 .443 .403
108.7	Gray Silt with Layers of Sand	7 7 7 10 7 16	0 0		.564 .906
99.7	Gray Silt with Layers of Sand and Sea Shells	11 13 7 5 5 7	0 0 0 0		.926 .504
89.7	Gray Silt with Layers of Sand	14 18 19 22	0 0 2		.564
83.7	Gray Silt with Pieces of Rock	23 26 29 31 29 22	5 3 * +		.363 .403
73.7	Gray Sand & Gravel	41 52 53 71	1 *		1.10
66.7	Ledge	76 100	60 19 *		.423
61.7				43	

* Penetration 6"
† Penetration 17"

B-504

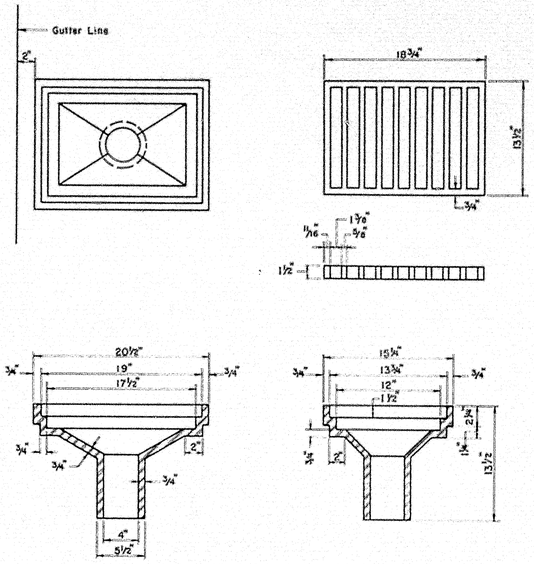
Elevation	Description of Materials	Casing Blows Per Foot	Spoon Blows Per Foot	Percent Recovery	Vane Shear Strength (Tons Per Sq. Ft.)
134.0	Brown Silt with Blue Streak	2 3 3 3 3 4 5 6 7 8	7 8		1.10
Water 122.5		9 10 11 12 13 14 15 16 17 18 19 20	C*		.866
120.0	Blue Sandy Silt	21 22 23 24 25 26 27 28 29 30 31 32	C*		.202 .282 .262 .242 .363 .403 .584 .564 .363 .403
114.0	Blue Silt	33 34 35 36 37 38 39 40 41 42 43 44	C*		
74.0	Gray Sandy Silt	45 46 47 48 49 50 51 52 53 54 55 56	C* C		.423
61.0	Gray Sand Gravel & Rocks	80 100			
58.0	Ledge			57	

* Penetration 6"

BORING LOG

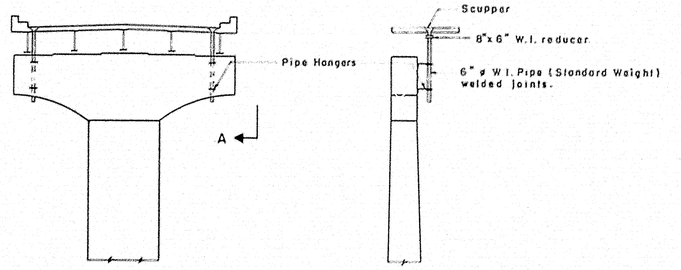
Scale 1/8" = 1'-0"

Notes:
1. Location of borings are shown on Key Plan thus ◉ B-501.
2. Borings are taken for purpose of design and show condition at boring points only, but do not necessarily show nature of materials to be encountered during construction.
3. Figures in boring columns indicate blows per foot on 2 1/2" or 4" casing, sample tube, or 1 3/8" spoon produced by a 304 # hammer with a fall of 16", 18" and 14" respectively.
4. Borings were taken by Maine Highway Commission during the month of November 1958.



SCUPPER DETAILS

Scale: 1½" = 1'-0"



SECTION A-A

PIPE DETAILS AT PIERS

Scale: 3/32" = 1'-0"

Notes:
1. All joints to be welded.
2. For location of scuppers see sheets 8, 9 & 10.
3. The Contractor shall submit complete drawings of the piping system to the Engineer for approval.
4. Pipe hangers to be Standard 1 1/2" x 3/8" clamps and anchor straps. Anchor straps to be fastened to pier cap with 3/4" ø cinch bolts (6" into concrete), two bolts per strap.
5. Scupper pipes at piers to be carried 6" below pier cap. Scupper pipes in girder spans to be carried 6" below structural steel.

THE CLARKESON ENGINEERING CO. INC.

DESIGN	CHECK H.P.	BRIDGE NO.
DRAWN R.J.F.	APPROVED W.A.H-C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
BORING LOG

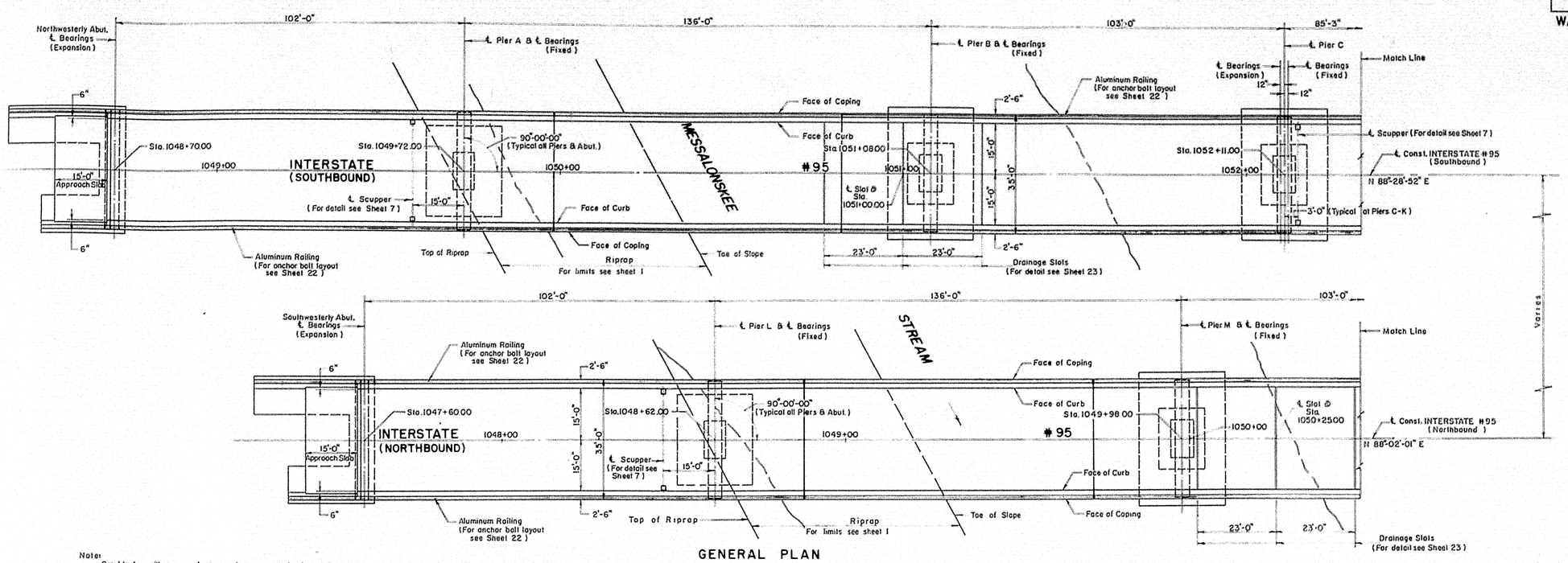
SHEET 7 OF 23 SHEETS — AUGUSTA, MAINE

78-179

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)	18	32

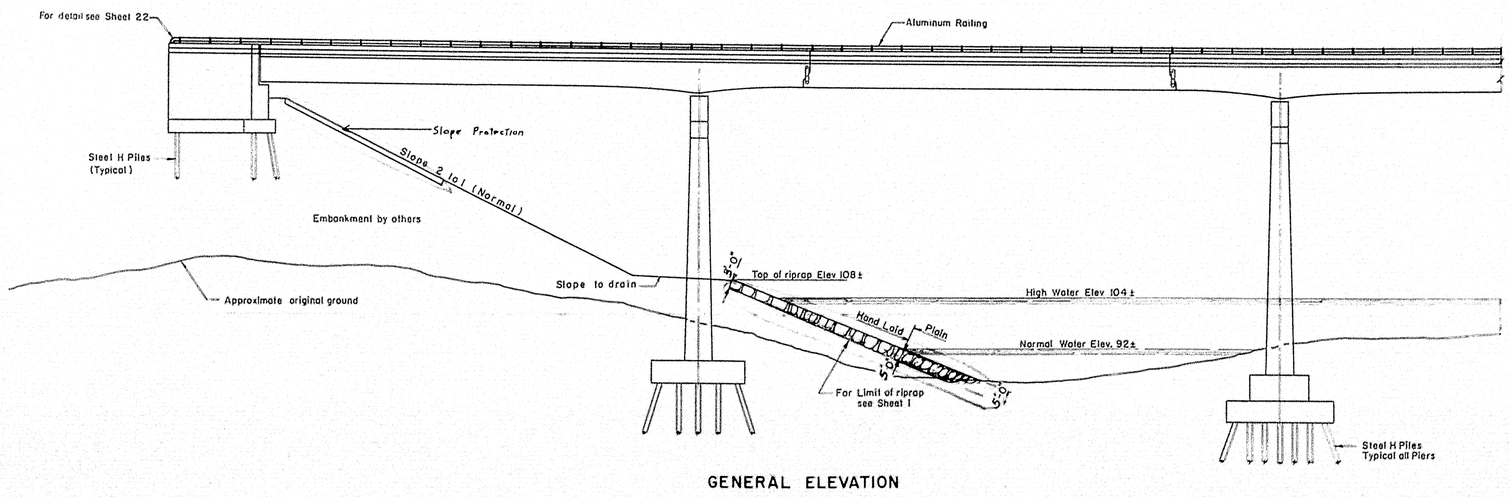
WATERVILLE INTERSTATE



Note:
Provide for railing expansion in panels over westerly abutments, Piers C to K, Piers N to U inclusive and over hinge locations.

GENERAL PLAN

Scale 1/16" = 1'-0"



GENERAL ELEVATION

Scale: 1/16" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN G B.	CHECK J T & H P.	PROJECT ENGINEER
DRAWN E.K.	APPROVED W A H - C.J.M.	CHIEF ENGINEER

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

GENERAL PLAN & ELEVATION

SHEET 8 OF 23 SHEETS AUGUSTA, MAINE

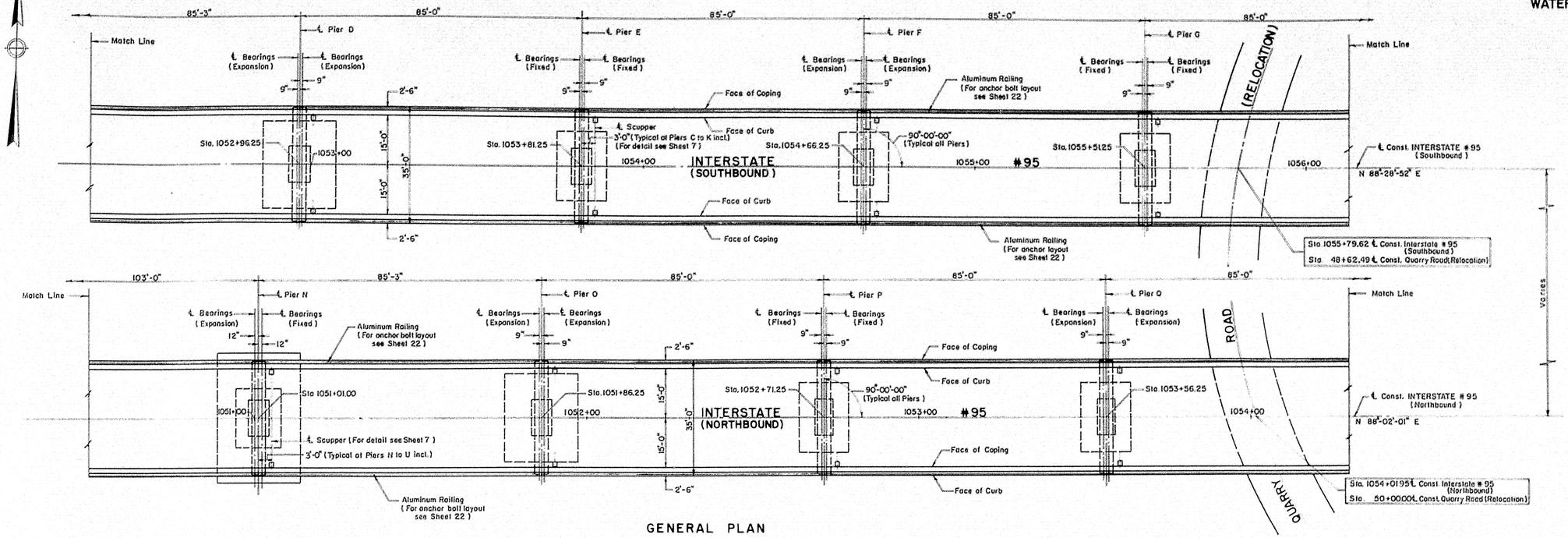
78-180

K-E PRINTED HERE IN U.S.A. W. & L.W. INC. 47810

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)	16	32

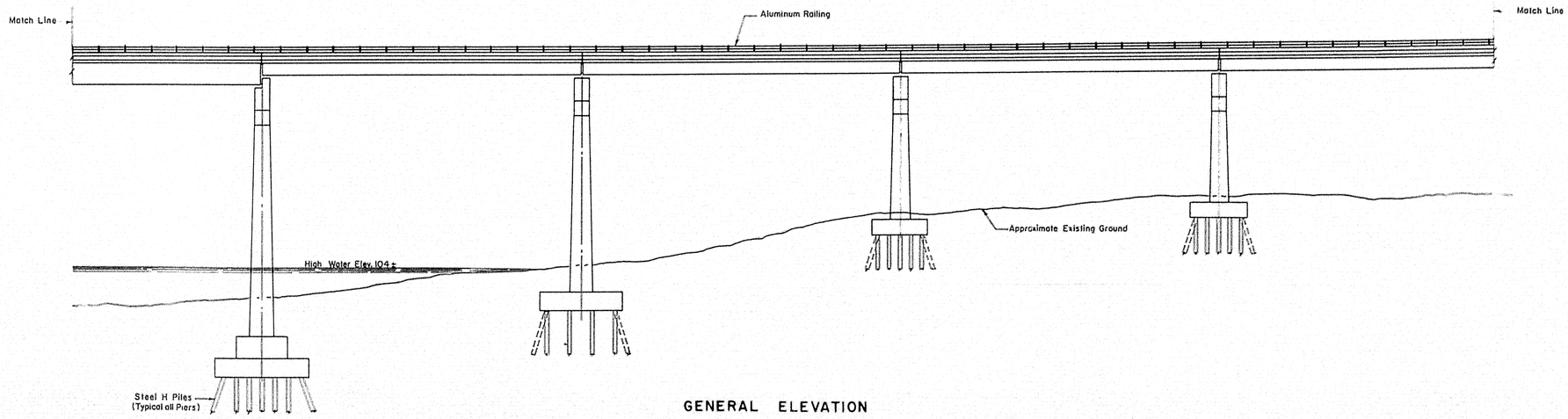
WATERVILLE INTERSTATE



GENERAL PLAN

Scale: 1/16" = 1'-0"

Note:
For railing expansion note see Sheet 8



GENERAL ELEVATION

Scale: 1/16" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN G.B.	CHECK J.T.B.H.P.	DESIGN NO.
DRAWN E.K.	APPROVED W.A.H.S.M.	

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

GENERAL PLAN & ELEVATION

SHEET 9 OF 23 SHEETS AUGUSTA, MAINE

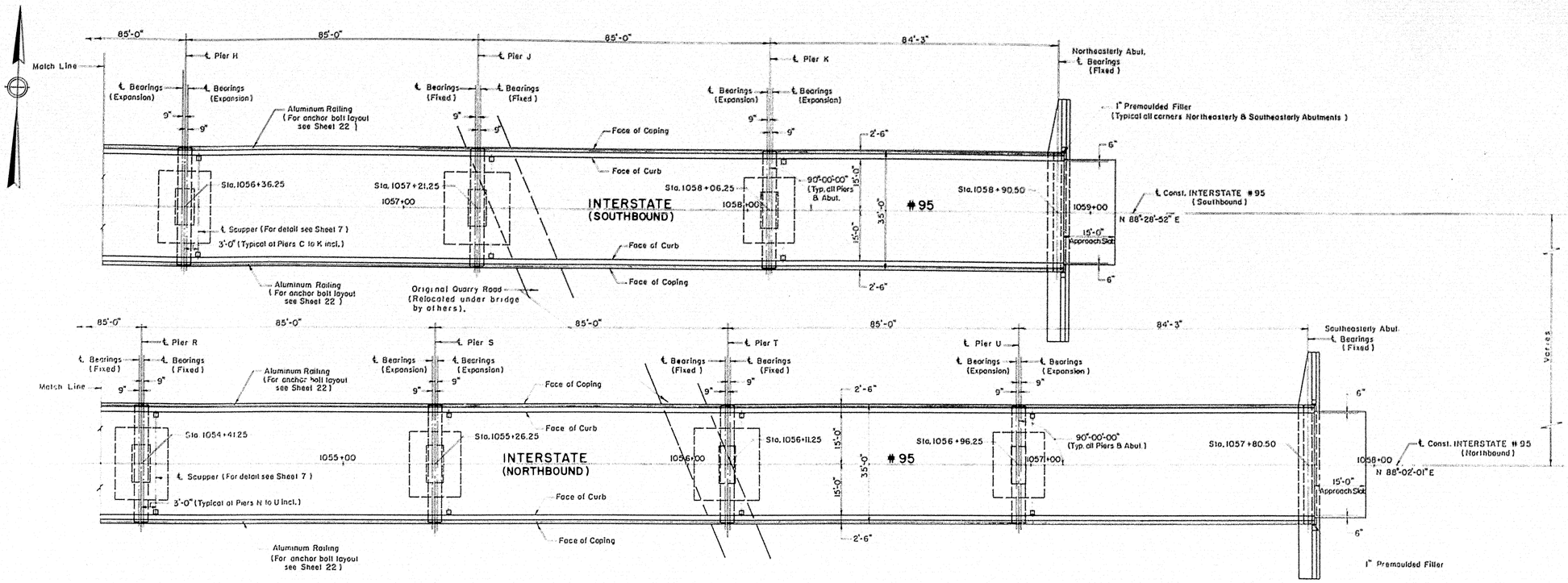
78-181

K-E PHOENIX MADE U.S.A. © H. L. M. INC. 1972

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	17	32

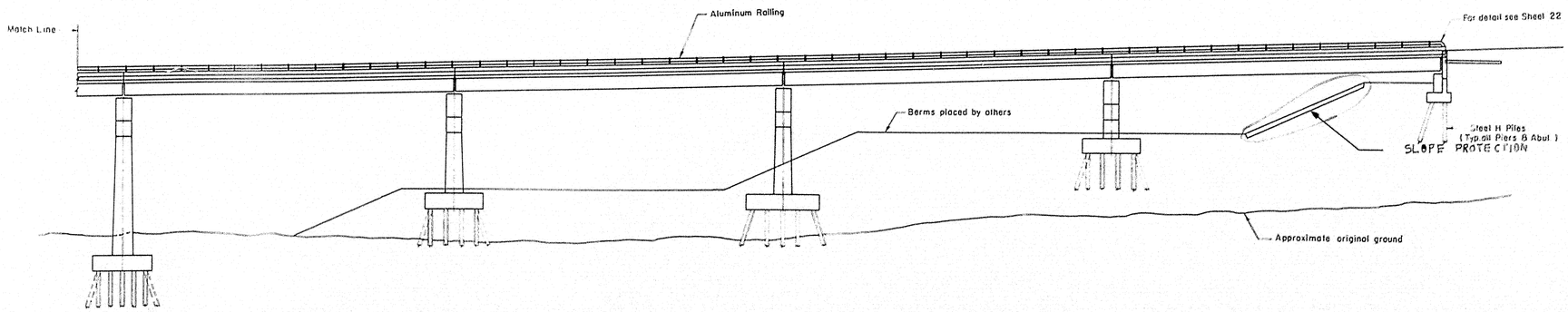
WATERVILLE INTERSTATE



GENERAL PLAN

Scale: 1/16" = 1'-0"

Note:
For railing expansion note see Sheet 8



GENERAL ELEVATION

Scale: 1/16" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.			
DESIGN G.B.	CHECKED J.T.B.H.P.	BRIDGE ALIGNMENT SURVEY PLOT	
DRAWN E.K.	APPROVED W.A.H.-C.J.M.		

STATE HIGHWAY COMMISSION

INTERSTATE #95

OVER

MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)

IN THE CITY OF

WATERVILLE

KENNEBEC COUNTY

GENERAL PLAN & ELEVATION

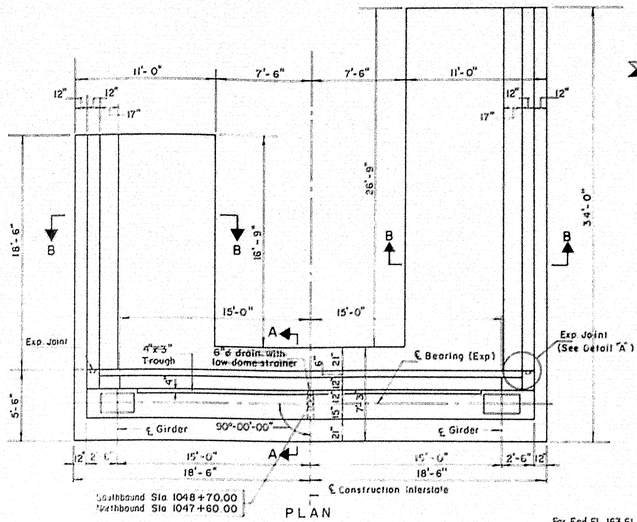
SHEET 10 OF 23 SHEETS AUGUSTA, MAINE

78-182

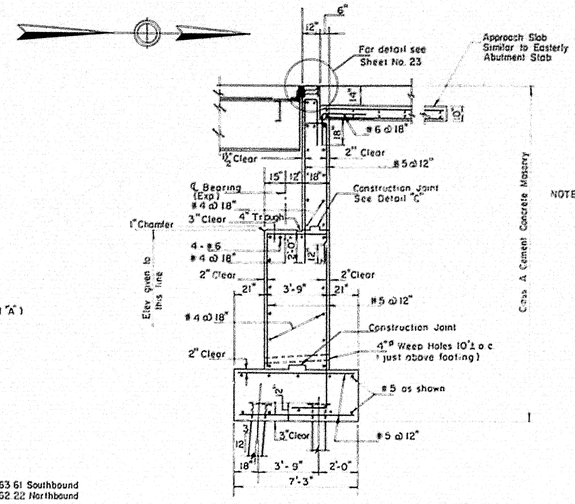
0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	18	32

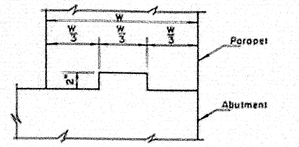
WATERVILLE INTERSTATE



PLAN

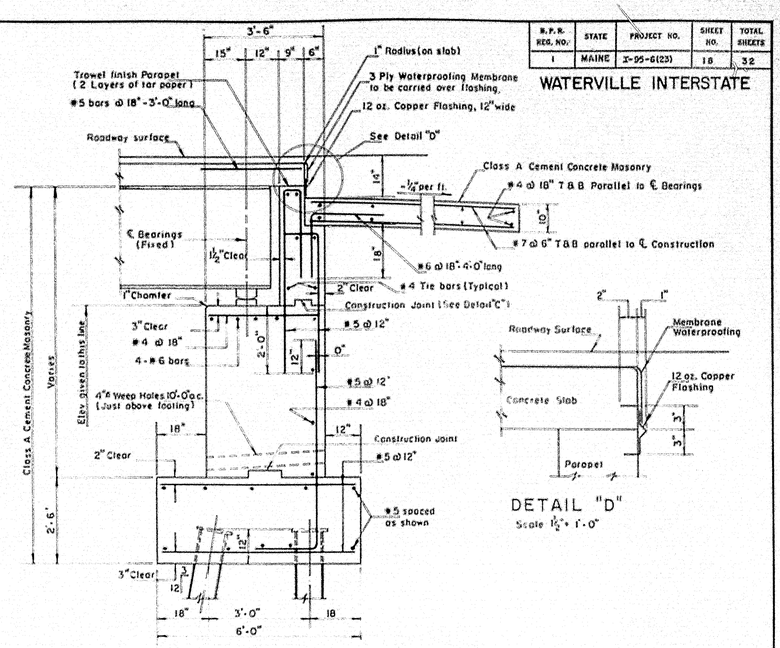


SECTION A-A



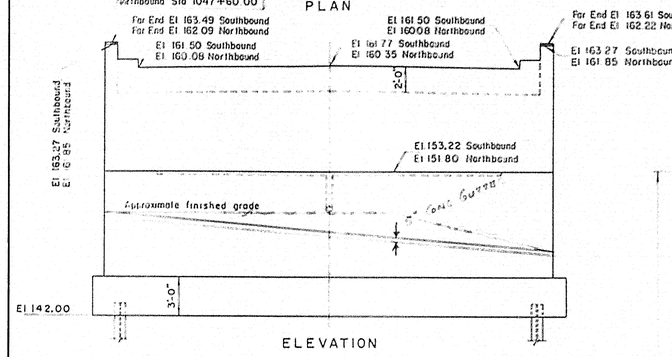
DETAIL "C"

NOTES
1. Concrete in backwall not to be placed until structural steel has been erected
2. Construction joint to be at or above bridge seat elevation
3. Provide French Drains behind abutments & wingwalls
4. Highway gravel base to be continued under approach slab to meet French Drains
5. Embankment under abutments to be constructed to elevation of bottom of footing before piles are driven
6. All piles to be driven to bedrock or practical refusal
7. All piles in the abutments to be 12BP53 steel piles Maximum pile load 37 tons
8. ↕ indicates pile battered 3 on 12 in direction of arrow
9. Cap all piles See detail Sheet 12
10. Approach Slab shall be paid for under Item 701-40 Portland Cement Concrete Roadway and Sidewalk Slabs on Steel Bridges
11. 3-ply Membrane Waterproofing and Bituminous Concrete Surfacing are not included in this Contract
12. Thoroughly coat sides & bottom of 4" drainage trough with bituminous damp-proofing

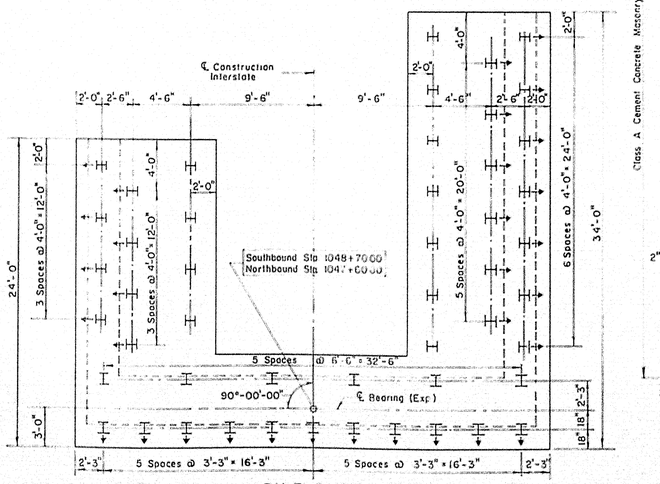


TYPICAL SECTION EASTERLY ABUTMENTS

DETAIL "D"



ELEVATION



PILE PLAN

49 piles required in each abutment

WESTERLY ABUTMENTS

Scale: 3/16" = 1'-0"

SECTION B-B

ELEVATION

WING REINFORCING LAYOUT (WESTERLY ABUTMENTS)

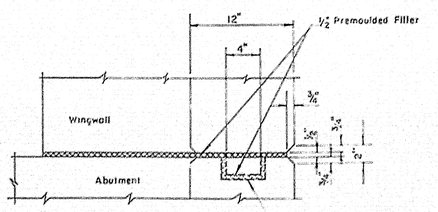
Scale: 3/8" = 1'-0"

ELEVATION

SECTION C-C

WING REINFORCING LAYOUT (EASTERLY ABUTMENTS)

Scale 3/8" = 1'-0"



DETAIL "A"

Scale: 1½" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.			
DESIGN J T	CHECK J M	BRIDGE NO	
DRAWN D E S	APPROVED WAH & JM	SURVEY PLOT	

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)

IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
ABUTMENTS

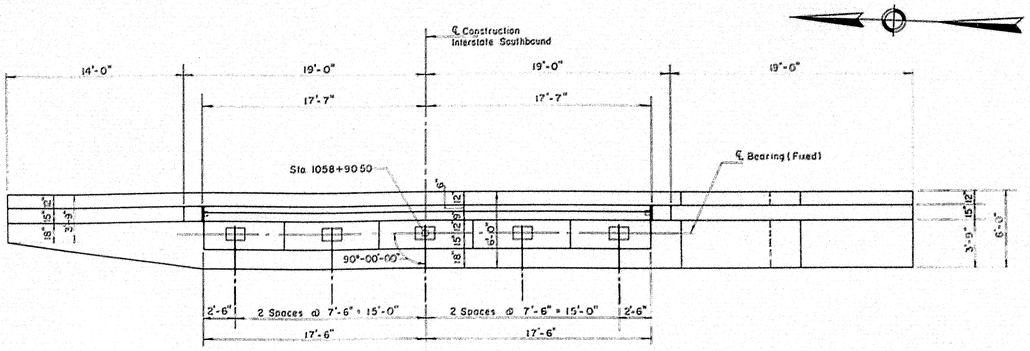
SHEET 11 OF 23 SHEETS — AUGUSTA, MAINE

78-183

0 1 2 3 4 5 INCHES

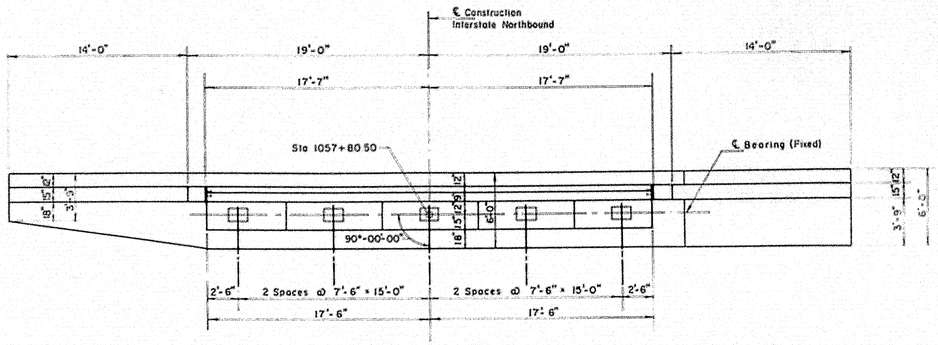
B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	19	32

WATERVILLE INTERSTATE



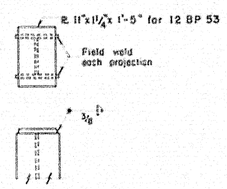
PLAN NORTHEASTERLY ABUTMENT

Scale: $\frac{3}{16}$" = 1'-0"



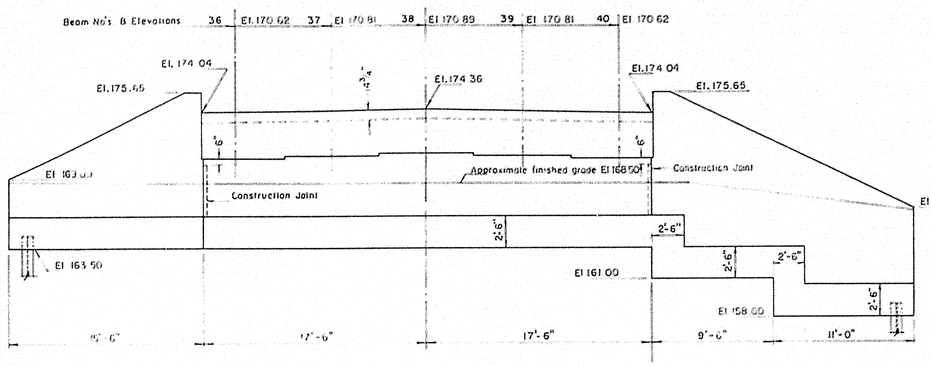
PLAN SOUTHEASTERLY ABUTMENT

Scale: $\frac{3}{16}$" = 1'-0"



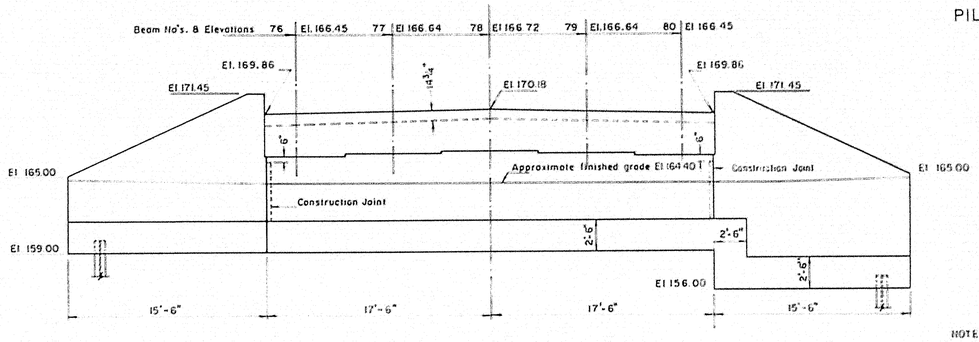
PILE CAP DETAIL

Scale ¾" = 1'-0"



ELEVATION NORTHEASTERLY ABUTMENT

Scale $\frac{3}{16}$" = 1'-0"

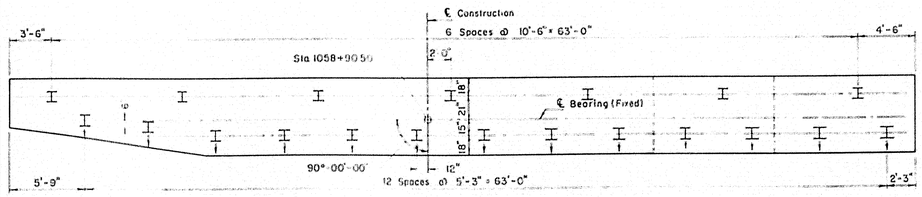


ELEVATION SOUTHEASTERLY ABUTMENT

Scale $\frac{3}{16}$" = 1'-0"

NOTES 1 For typical abutment section and wing section see Sheet 11

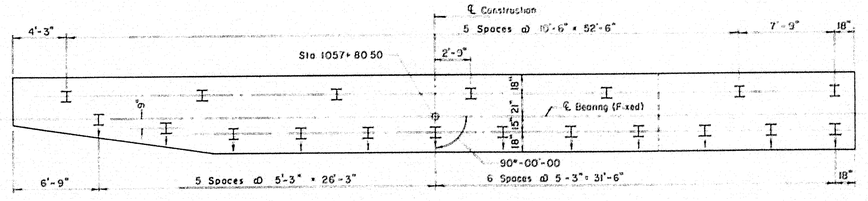
2 For general notes, sections and details see Sheet 11



20 piles required.

PILE PLAN NORTHEASTERLY ABUTMENT

Scale: $\frac{3}{16}$" = 1'-0"



19 piles required.

PILE PLAN SOUTHEASTERLY ABUTMENT

Scale: $\frac{3}{16}$" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN	J.T.	CHECK J.T.M.	BRIDGE NO. SURVEY
DRAWN	D.E.S.	APPRD. DWN. & CJM.	PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
NORTHEASTERLY & SOUTHEASTERLY
ABUTMENTS

SHEET 12 OF 23 SHEETS AUGUSTA, MAINE

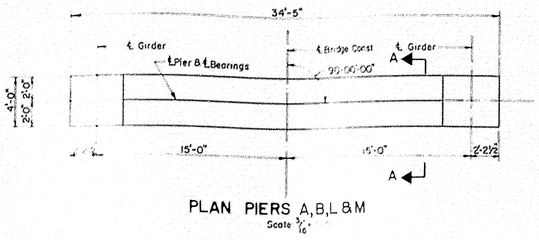
78-184

K-E PRODUCTS W. L. M. INC.

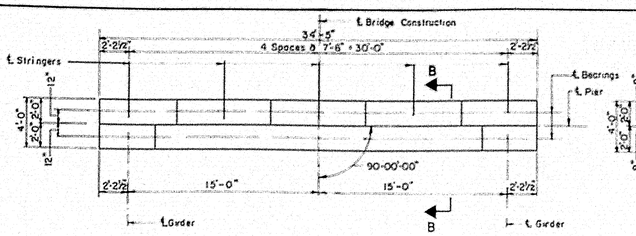
0 1 2 3 4 5 INCHES

B.P.R. REG. NO	STATE	PROJECT NO.	SHEET NO	TOTAL SHEETS
1	MAINE	I-95-6(23)	20	32

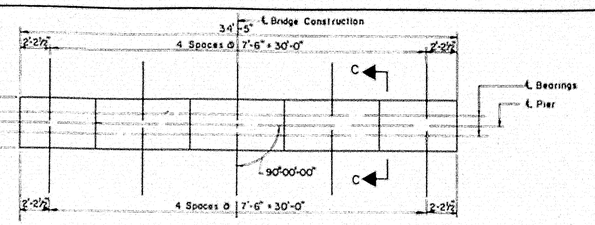
WATERVILLE INTERSTATE



PLAN PIERS A,B,L & M
Scale 3/16" = 1'-0"

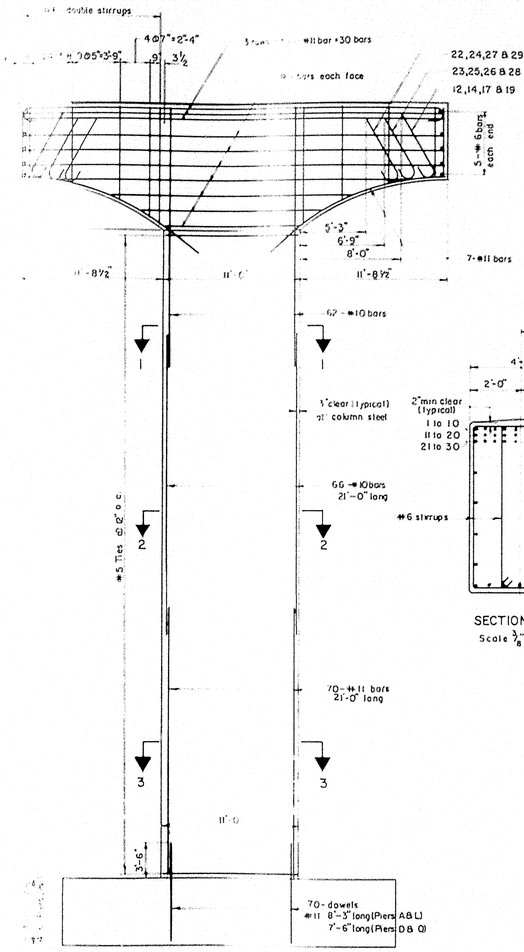


PLAN PIERS C & N
Scale 3/16" = 1'-0"



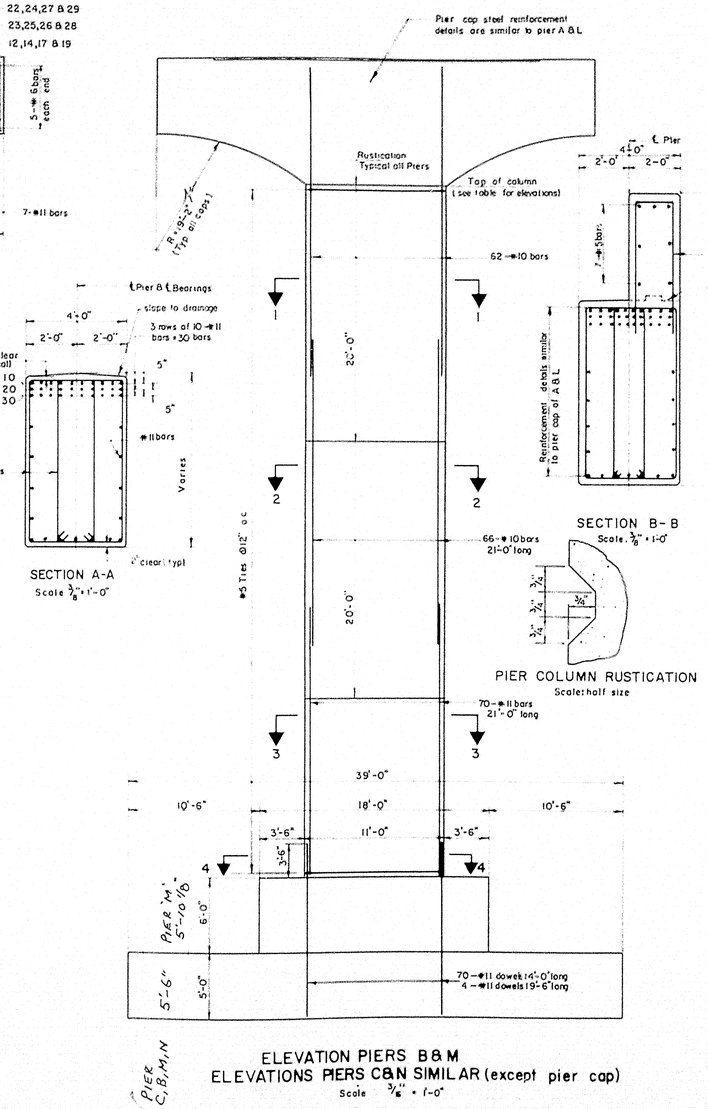
PLAN PIERS D thru K & O thru U
Scale 3/16" = 1'-0"

NORTHBOUND			SOUTHBOUND		
PIER	Elevation Top of Col	Elevation Bott of Fig	PIER	Elevation Top of Col.	Elevation Bott of Fig
L	138.67	94.00	A	140.20	94.00
M	138.11	83.50	B	139.63	83.00
N	140.38	75.40	C	142.28	75.65
O	144.82	93.00	D	146.92	91.00
P	145.59	113.00	E	147.95	111.00
Q	146.60	115.00	F	148.15	117.00
R	147.99	113.00	G	150.81	114.50
S	149.62	128.00	H	152.73	22.00
T	151.63	130.00	J	[illegible]	50.00
U	153.88	145.00	K	[illegible]	54.00



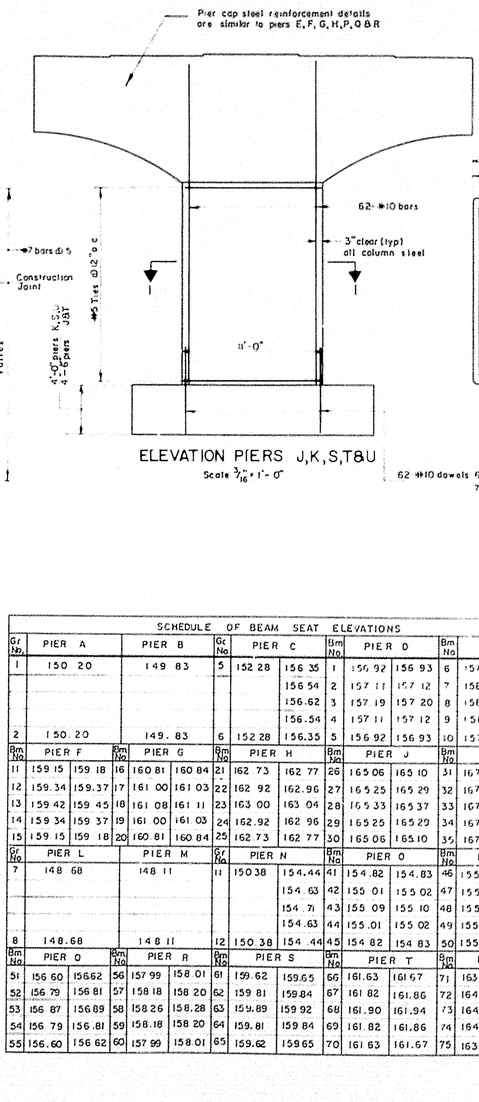
ELEVATION PIERS A&L
PIERS D&O SIMILAR (except cap reinforcement)
Scale: 3/16" = 1'-0"

Note For piers D and O cap reinforcement see elevation piers E, F, G etc.

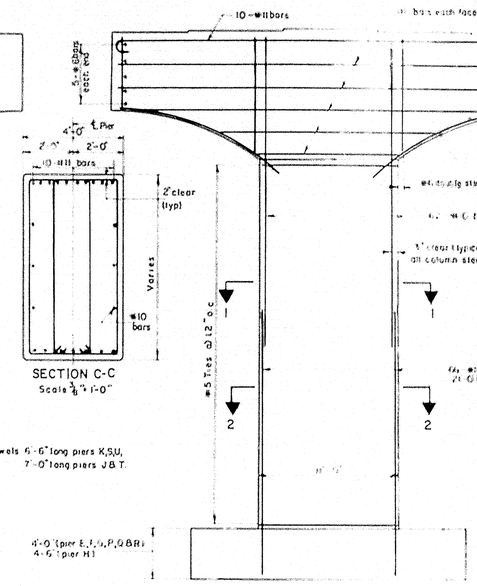


ELEVATION PIERS B & M
ELEVATIONS PIERS C & N SIMILAR (except pier cap)
Scale 3/16" = 1'-0"

PIER COLUMN RUSTICATION
Scale: half size



ELEVATION PIERS J, K, S, T & U
Scale 3/16" = 1'-0"



ELEVATION PIERS E, F, G, H, P, Q & R
Scale 3/16" = 1'-0"

SCHEDULE OF BEAM SEAT ELEVATIONS

Gr No.	PIER A		PIER B		Gr No.	PIER C		Bm No	PIER D		Bm No	PIER E		Bm No
1	150.20		149.83		5	152.28	156.35	1	156.92	156.93	6	157.90	157.92	11
							156.54	2	157.11	157.12	7	158.09	158.11	12
							156.62	3	157.19	157.20	8	158.17	158.19	13
							156.54	4	157.11	157.12	9	158.09	158.11	14
2	150.20		149.83		6	152.28	156.35	5	156.92	156.93	10	157.90	157.92	15
Bm No	PIER F		PIER G		Bm No	PIER H		Bm No	PIER J		Bm No	PIER K		Bm No
11	159.15	159.18	160.81	160.84	21	162.73	162.77	26	165.06	165.10	31	167.66	167.71	36
12	159.34	159.37	161.00	161.03	22	162.92	162.96	27	165.25	165.29	32	167.85	167.90	37
13	159.42	159.45	161.08	161.11	23	163.00	163.04	28	165.33	165.37	33	167.93	167.98	38
14	159.34	159.37	161.00	161.03	24	162.92	162.96	29	165.25	165.29	34	167.85	167.90	39
15	159.15	159.18	160.81	160.84	25	162.73	162.77	30	165.06	165.10	35	167.66	167.71	40
Gr No.	PIER L		PIER M		Gr No.	PIER N		Bm No	PIER O		Bm No	PIER P		Bm No
7	148.68		148.11		11	150.38	154.44	41	154.82	154.83	46	155.59	155.60	51
							154.63	42	155.01	155.02	47	155.78	155.79	52
							154.71	43	155.09	155.10	48	155.86	155.87	53
							154.63	44	155.01	155.02	49	155.78	155.79	54
8	148.68		148.11		12	150.38	154.44	45	154.82	154.83	50	155.59	155.60	55
Bm No	PIER Q		PIER R		Bm No	PIER S		Bm No	PIER T		Bm No	PIER U		Bm No
51	156.60	156.62	157.99	158.01	61	159.62	159.65	66	161.63	161.67	71	163.88	163.93	76
52	156.79	156.81	158.18	158.20	62	159.81	159.84	67	161.82	161.86	72	164.07	164.12	77
53	156.87	156.89	158.26	158.28	63	159.89	159.92	68	161.90	161.94	73	164.15	164.20	78
54	156.79	156.81	158.18	158.20	64	159.81	159.84	69	161.82	161.86	74	164.07	164.12	79
55	156.60	156.62	157.99	158.01	65	159.62	159.65	70	161.63	161.67	75	163.88	163.93	80

NOTES
1. For beam numbers at piers see [illegible] sheet 15
2. For footing sizes and pile [illegible] see sheet 16
3. For numbered sections see sheet 16
4. Lap for steel reinforcement [illegible] except as noted
5. Pier steel is symmetrical about [illegible] pier
6. Where necessary, construction joints in pier columns are to be located at rustication
7. All concrete in Piers [illegible]

THE CLARKESON ENGINEERING CO., INC.

DESIGN M.N.P | CHECK [illegible] | CHARGE NO. [illegible]
DRAWN E.K.-D.A.T | APPROVED W.A.S. G.M. | SHEET NO. P. GT

STATE HIGHWAY COMMISSION

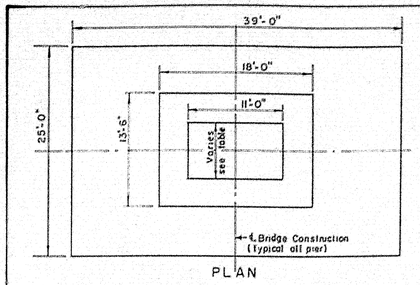
INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RE.LOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
PIERS

SHEET 13 OF 23 SHEETS | AUGUSTA, MAINE

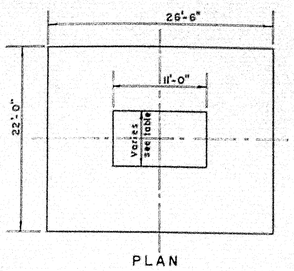
78-185

B.P.R. REG. NO	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	21	32

WATERVILLE INTERSTATE



PLAN



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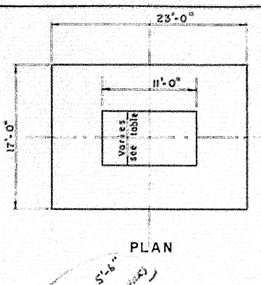

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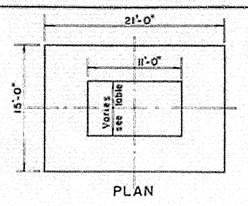

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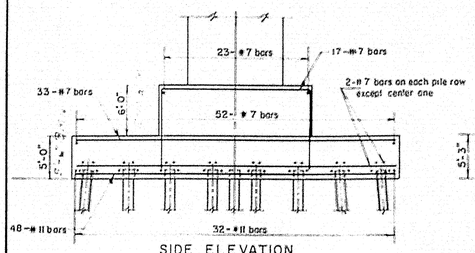
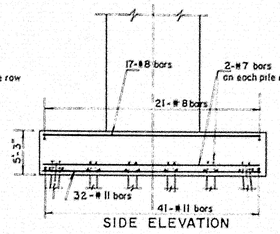
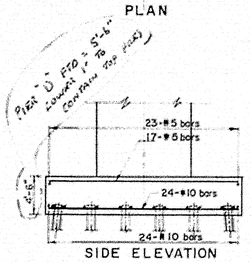


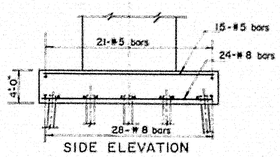
SIDE ELEVATION



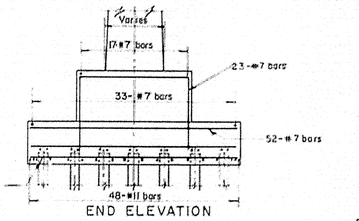
SIDE ELEVATION



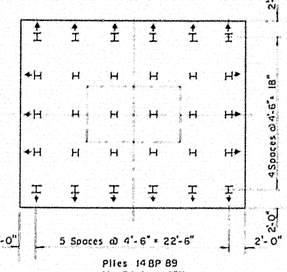
SIDE ELEVATION



SIDE ELEVATION



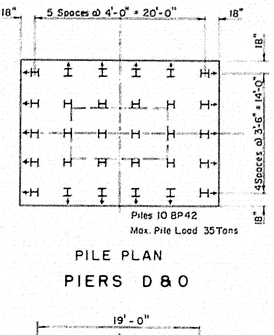
END ELEVATION



PILE PLAN

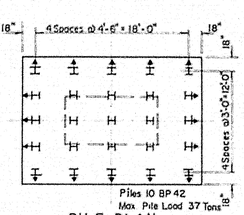
PIERS A & L

Scale: 1/8" = 1'-0"



PILE PLAN

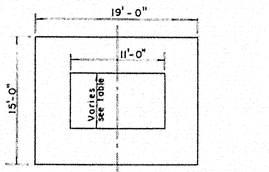
PIERS D & O



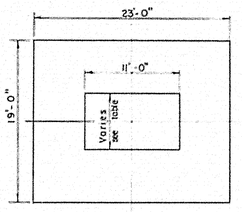
PILE PLAN

PIERS E, F, G, P, Q & R

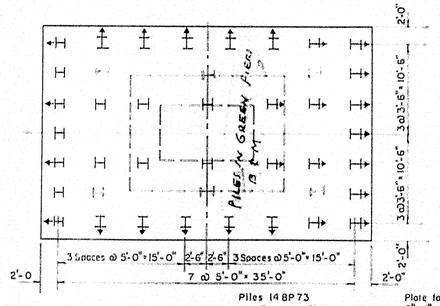
Scale: 1/8" = 1'-0"



PLAN



PLAN

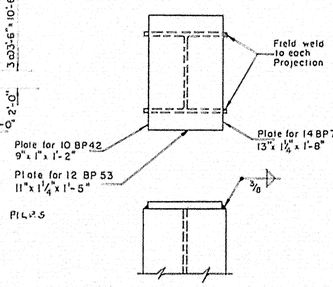


PILE PLAN

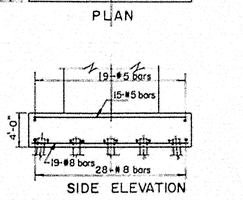
PIERS B, C, M & N

Scale: 1/8" = 1'-0"

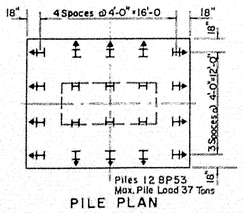
PIER N ADDITIONAL PILES
14 BP 89



PILE CAP DETAIL



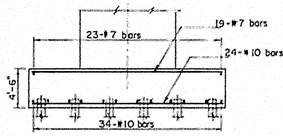
SIDE ELEVATION



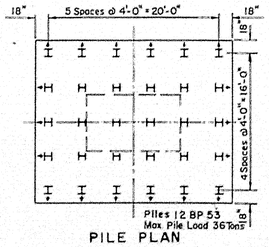
PILE PLAN

PIERS K, S & U

Scale: 1/8" = 1'-0"



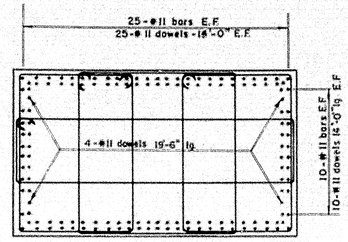
SIDE ELEVATION



PILE PLAN

PIERS H, J & T

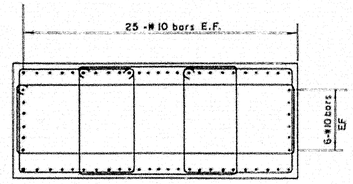
Scale: 1/8" = 1'-0"



SECTION 4-4

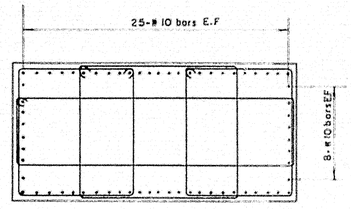
Scale 3/8" = 1'-0"

Note All column bars and dowels to be lapped as shown.



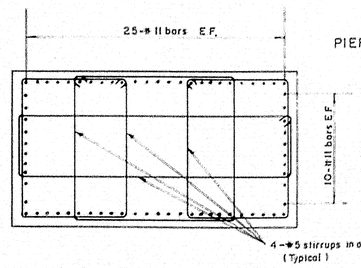
SECTION 1-1

Scale 3/8" = 1'-0"



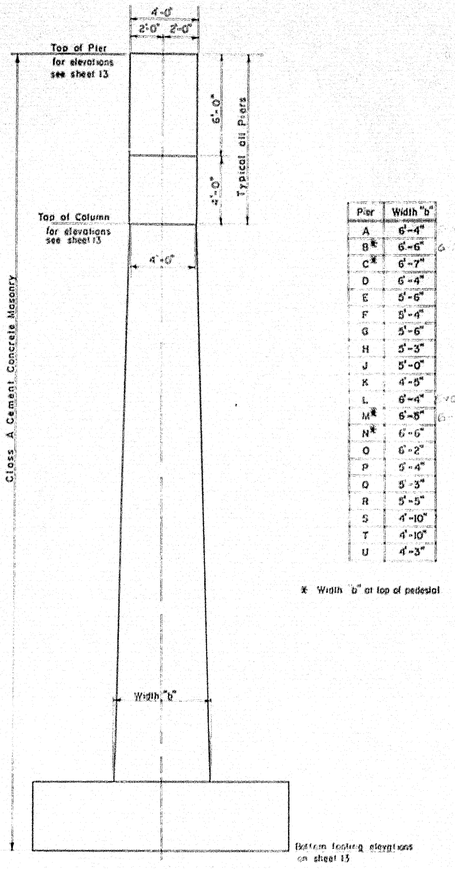
SECTION 2-2

Scale 3/8" = 1'-0"



SECTION 3-3

Scale 3/8" = 1'-0"



TYPICAL PIER END ELEVATION

PIERS D to R & O to U Incl., A & L

PIERS B, C, M, N Similar except for pedestal footing

Pier	Width "b"
A	6'-4"
B*	6'-6"
C*	6'-7"
D	6'-4"
E	5'-6"
F	5'-4"
G	5'-6"
H	5'-3"
J	5'-0"
K	4'-8"
L	6'-4"
M*	6'-8"
N*	6'-6"
O	6'-2"
P	5'-4"
Q	5'-3"
R	5'-5"
S	4'-10"
T	4'-10"
U	4'-3"

* Width "b" at top of pedestal

Notes
1. Concrete cover to steel reinforcement in footing 3" clear.
2. Cap all piles.
3. Pile embedment - 12" for all footings.
4. All piles to be driven to bedrock or practical refusal (see "Special Provisions")
5. → Indicates pile battered 3:12, in direction of arrow.
6. For numbered section see sheet 13

THE CLARKESON ENGINEERING CO., INC.

DESIGN	M.H.P.	CHECK	M.H.	BRIDGE NO.
DRAWN	D.E.S.	APPROVED	M.H.B.S.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
PIER FOOTINGS

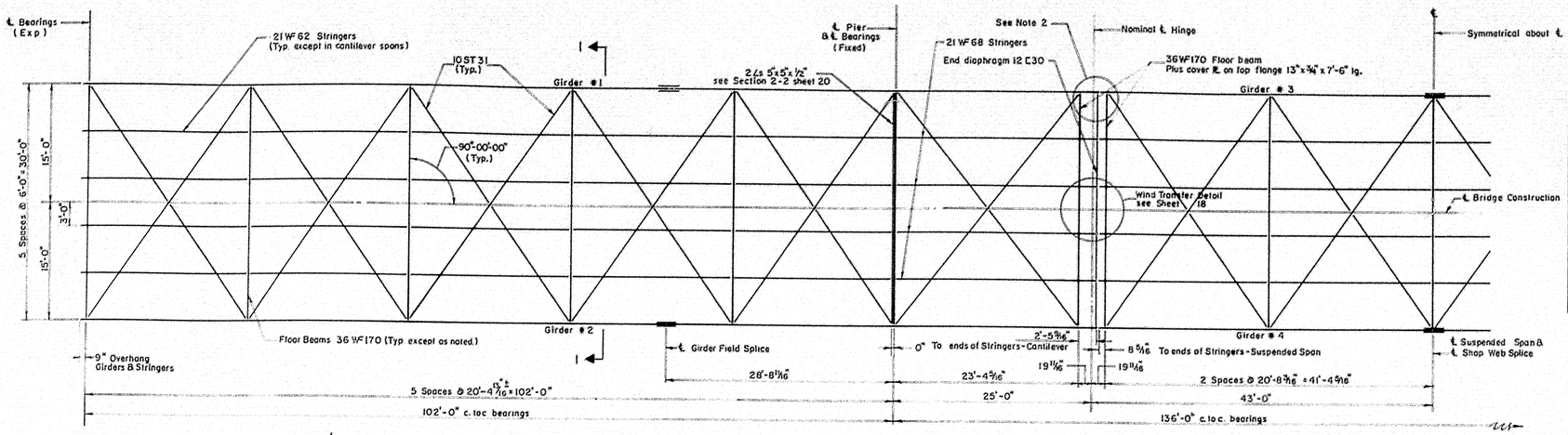
SHEET 14 OF 23 SHEETS AUGUSTA, MAINE

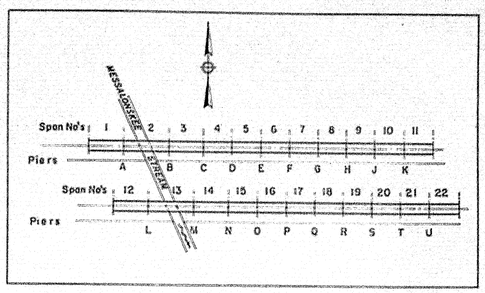
78-186

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	22	32

WATERVILLE INTERSTATE

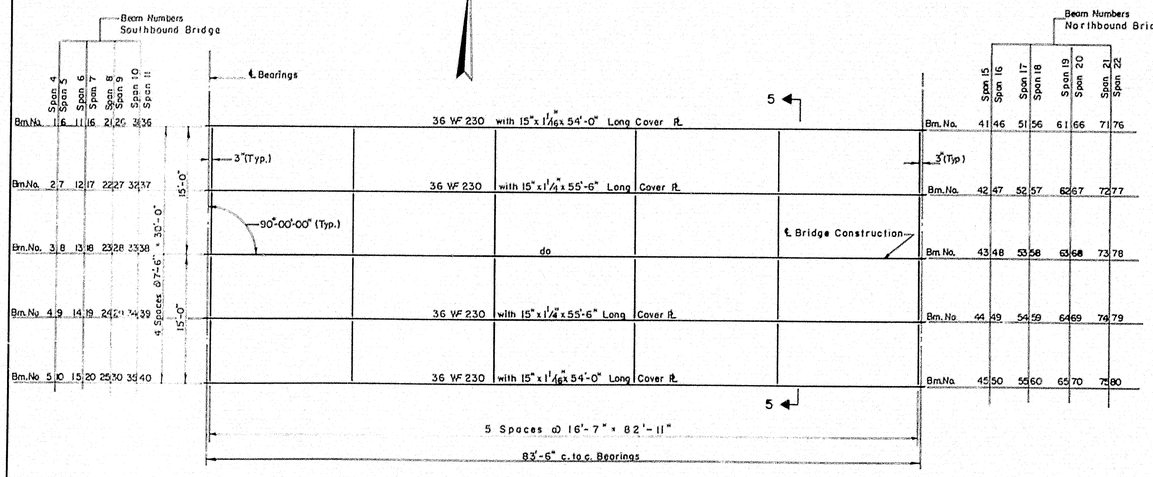




KEY PLAN
No Scale

FRAMING PLAN
SPANS 1,2,3,12,13, & 14

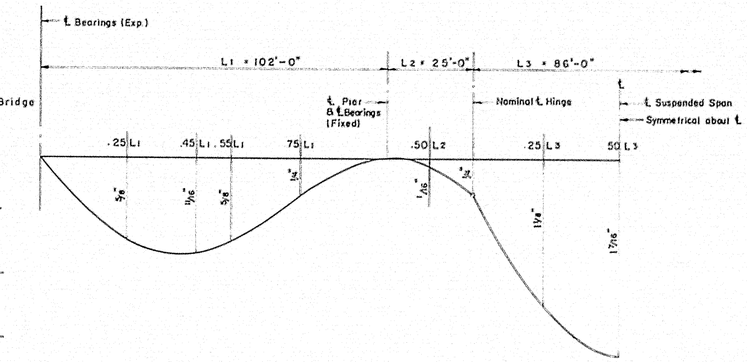
Scale: 1/8" = 1'-0"



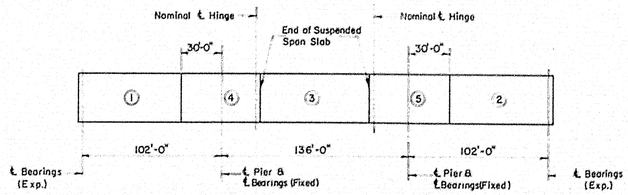
FRAMING PLAN
SPANS 4 TO 11 & 15 TO 22

Scale: 1/8" = 1'-0"

Notes. 1. All intermediate diaphragms to be 18 C 42.7, for detail see sheet 22.
2. All end diaphragms to be 12 C 12.0 ; for details see sheet 22.
3. For cover plate and shear connector details see sheet 22.
4. Beams and cover plates are A 373 steel.



TOTAL DEAD LOAD DEFLECTION DIAGRAM
(GIRDER SPANS)



Note: All of sections 1 & 2 to be poured before any of section 3. All of section 3 to be poured before any of sections 4 & 5.

DECK POURING SEQUENCE
(GIRDER SPANS)

Notes 1 All rivets are to be 7/8" ø. Holes are to be 15/16 ø.
2 For overall dimensions of girder in vicinity of hinge see Hinge Detail sheet 18
3 For Sections 1-1 & 5-5 see sheet 16.
4 Girders are to be cambered to the extent that the bridge deck under full dead load will follow as nearly as practicable the design profile.
5 For scupper location see sheet 8; for scupper details see sheet 7.
6 For lateral bracing details see sheet 20.
7 High tensile strength bolts may be used in place of rivets for field connections

THE CLARKESON F. GREENING CO., INC.

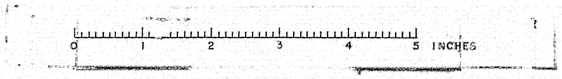
DESIGN R.F.B.G.B.	CHECKED W.H.C.J.M.O.T.	BRIDGE NO.
DRAWN E.K.	APPROVED W.H.C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
FRAMING PLAN

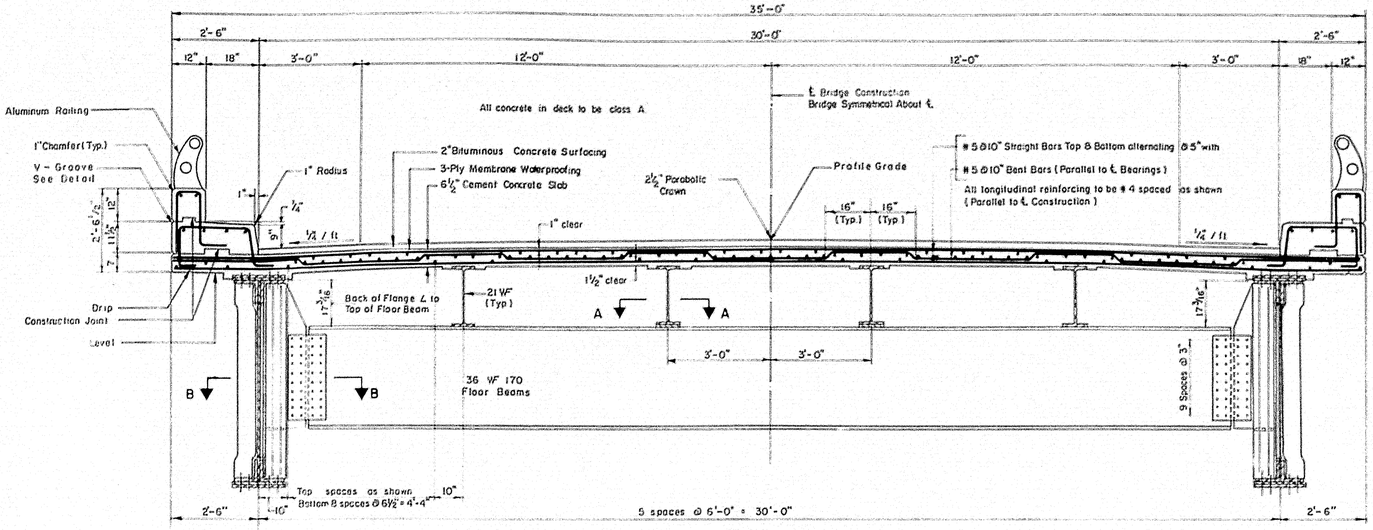
SHEET 15 OF 23 SHEETS AUGUSTA, MAINE

78-187



B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	23	32

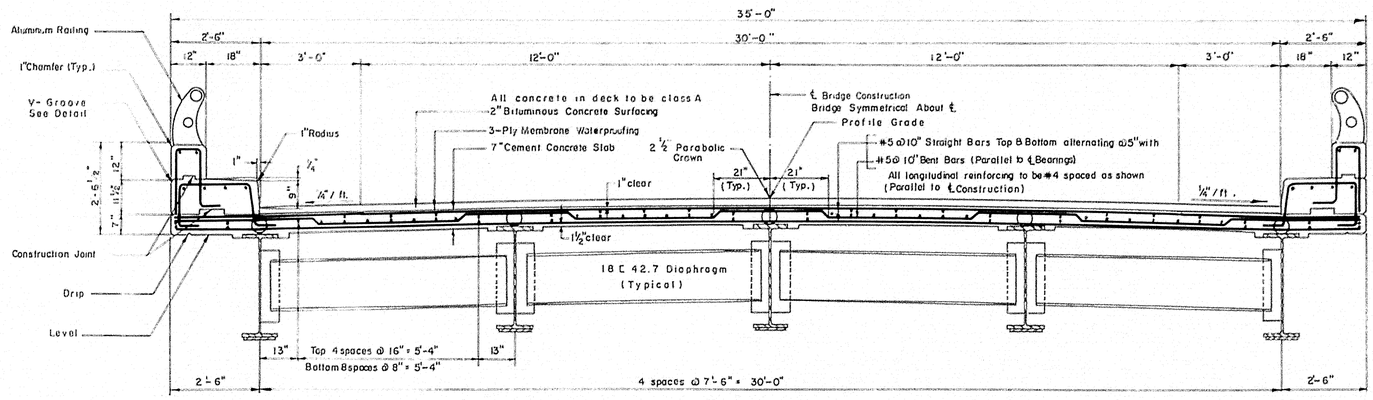
WATERVILLE INTERSTATE



SECTION I - I

BRIDGE CROSS SECTION (GIRDER SPANS)

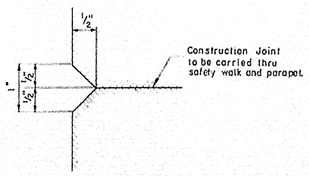
Scale ½" = 1'-0"



SECTION 5 - 5

TYPICAL BRIDGE CROSS SECTION (STRINGER SPANS)

Scale: ½" = 1'-0"



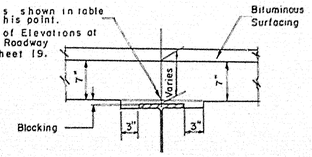
V-GROOVE DETAIL

Not to scale

Notes: 1 Bituminous Concrete Surfacing and 3 - Ply Membrane Waterproofing are not in this contract.

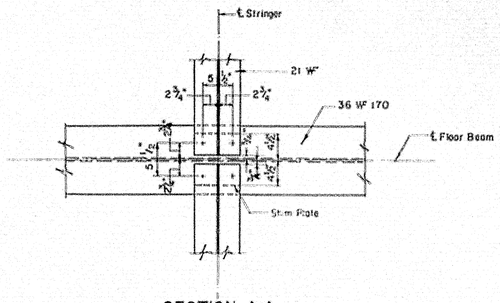
2. Parapets and safety walks to have transverse construction joints 20'± on centers. Joints are not to be located under railing post. Contact surfaces of joints to be painted with a bituminous material. Exposed surfaces are to be chamfered ½". Reinforcing steel to be carried thru joints.

3. All deck slab concrete in each stringer span shall be placed in one continuous operation.



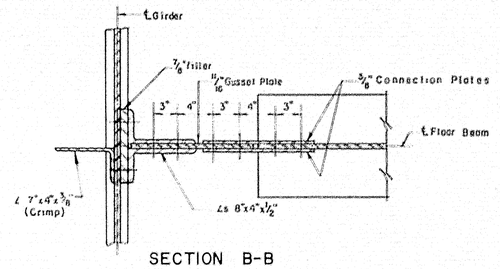
STRINGER HAUNCH DETAIL (STRINGER SPANS)

Scale: 1" = 1'-0"



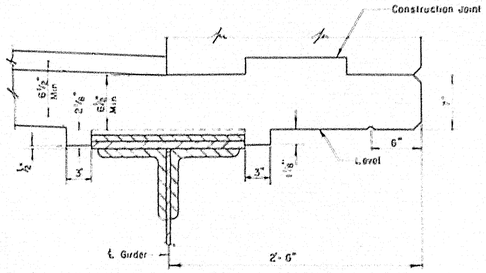
SECTION A-A

Scale 1" = 1'-0"



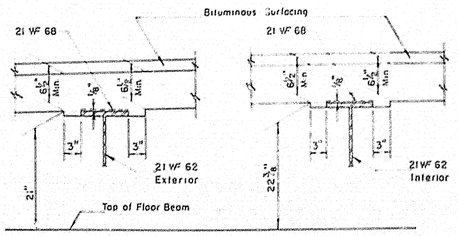
SECTION B-B

Scale 1½" = 1'-0"



GIRDER HAUNCH DETAIL

Scale 1½" = 1'-0"



STRINGER HAUNCH DETAIL (GIRDER SPANS)

Scale: 1" = 1'-0"

THE CLARKESON ENGINEERING CO., INC.

DESIGN	R.F.B.G.B.	CHECK	J.M.B.T.	BRIDGE NO.
DRAWN	D.A.T.	APPROVED	W.A.H. - C.M.	SURVEY

STATE HIGHWAY COMMISSION

INTERSTATE #95

OVER

MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)

IN THE CITY OF

WATERVILLE

KENNEBEC COUNTY

TYPICAL BRIDGE CROSS SECTIONS

SHEET 16 OF 23 SHEETS AUGUSTA, MAINE

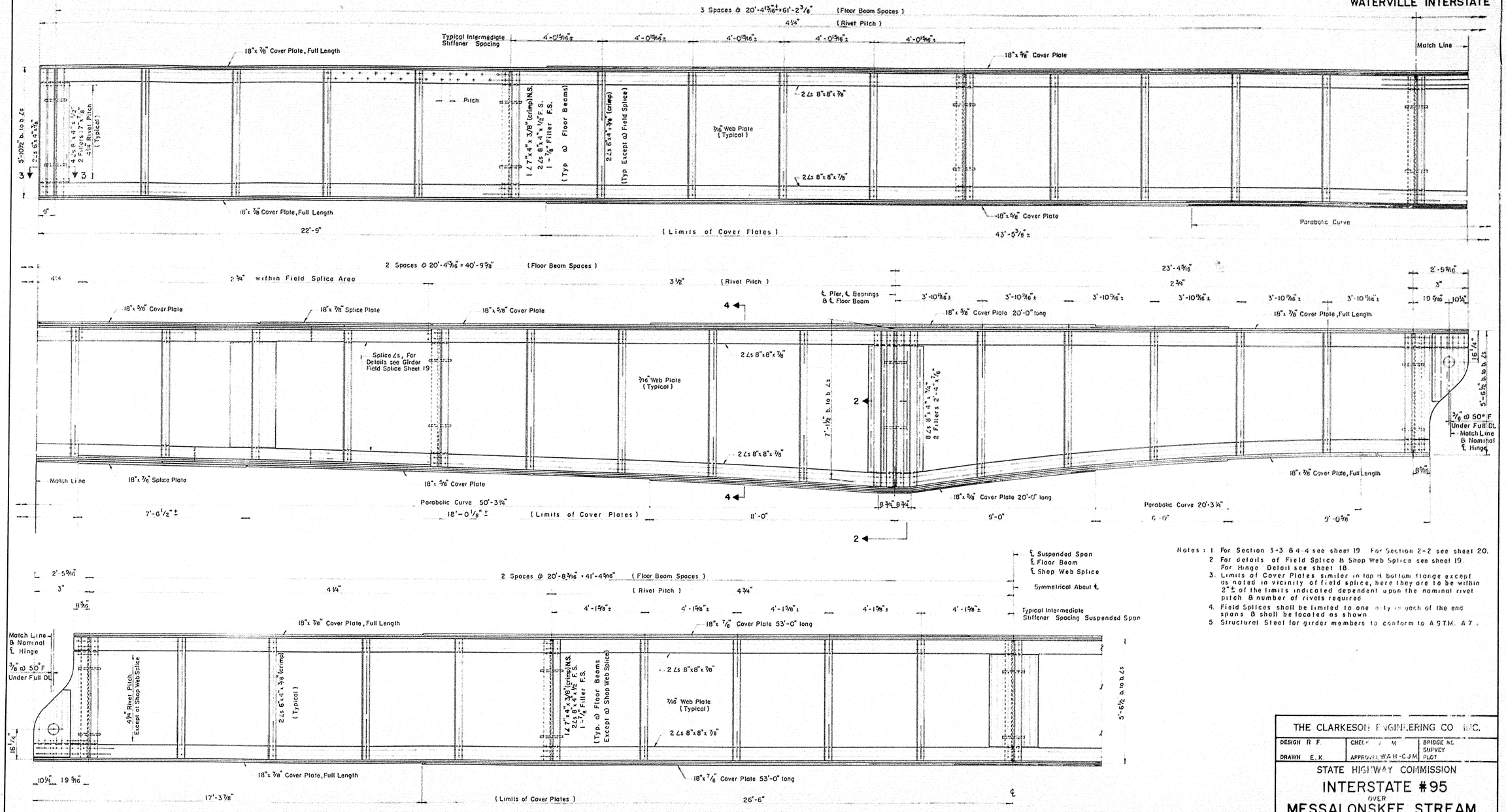
78-188

K+E PHOENIX PLACE 143 © PHOENIX PLACE 1970 R. L. M. INC. 42616

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)	24	32

WATERVILLE INTERSTATE



Pitch

TYPICAL RIVET ARRANGEMENT EXCEPT AT FIELD SPLICES

GIRDER ELEVATION

Scale: 1/2" = 1'-0"

Notes:
1. For Section 3-3 & 4-4 see sheet 19. For Section 2-2 see sheet 20.
2. For details of Field Splice & Shop Web Splice see sheet 19. For Hinge Detail see sheet 18.
3. Limits of Cover Plates similar on top & bottom flange except as noted in vicinity of field splice, here they are to be within 2"± of the limits indicated dependent upon the nominal rivet pitch & number of rivets required.
4. Field Splices shall be limited to one only at each of the end spans & shall be located as shown.
5. Structural Steel for girder members to conform to A.S.T.M. A 7.

THE CLARKESON ENGINEERING CO. INC.

DESIGN R. F.	CHECKED W. M.	BRIDGE NO.
DRAWN E. K.	APPROVED W.A.H.-C.J.M.	SURVEY PLOT

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

GIRDER ELEVATION

SHEET 17 OF 23 SHEETS AUGUSTA, MAINE

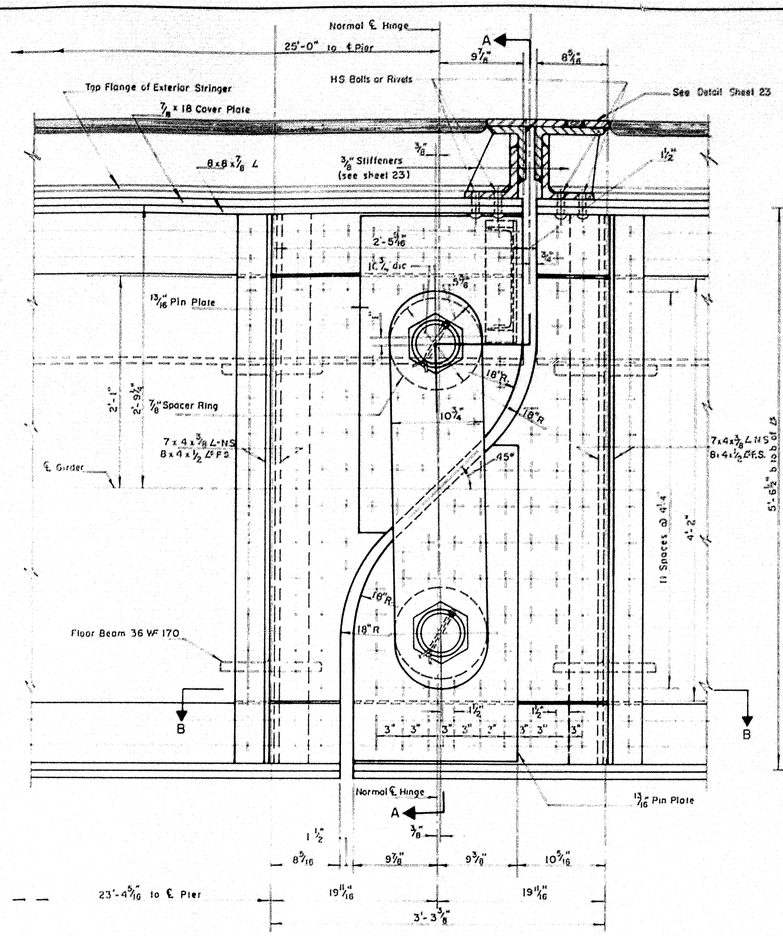
78-189

K+E PHOENIX MAINE 366 © KEUFFEL & ESSER CO. MADE IN U.S.A.

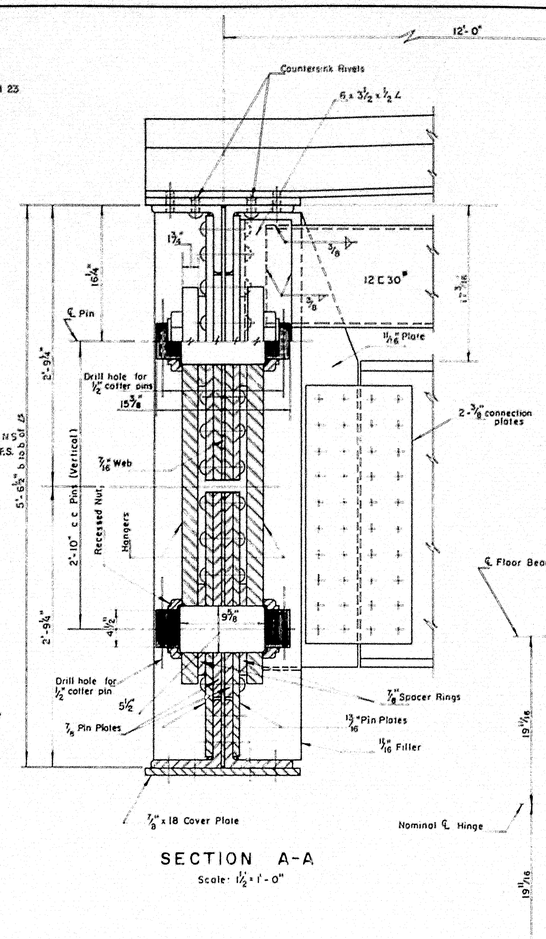
0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6 (23)	25	32

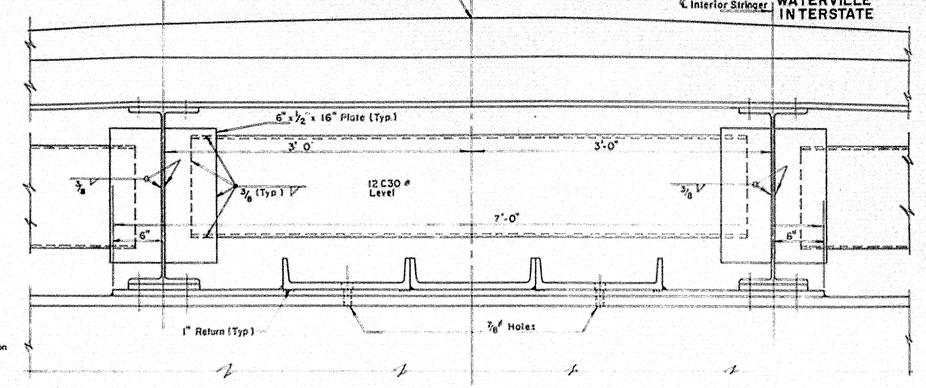
WATERVILLE
INTERSTATE

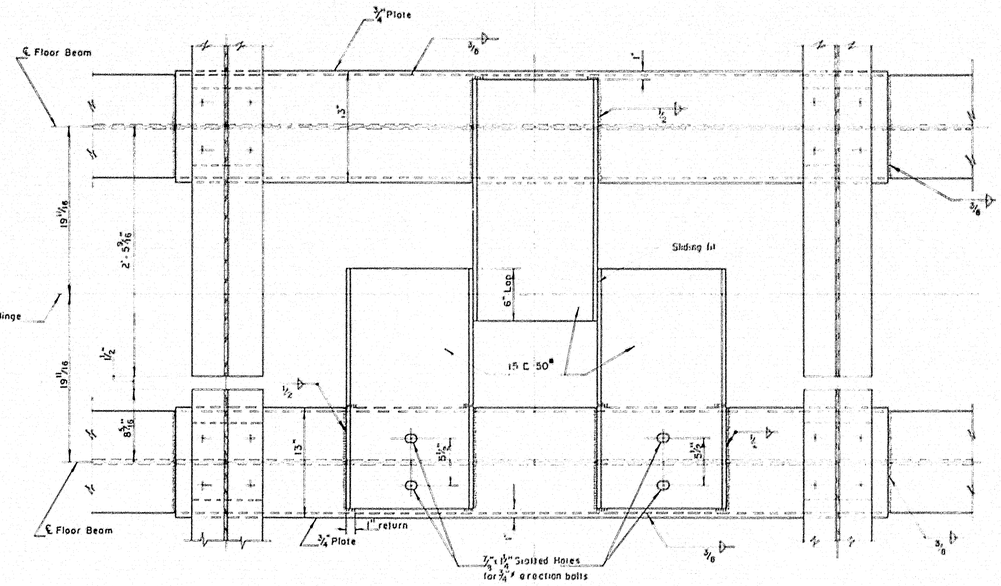


HINGE DETAIL
Scale: 1½" = 1'-0"

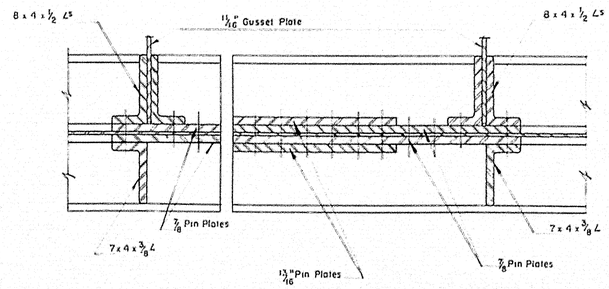


SECTION A-A
Scale: 1½" = 1'-0"





WIND TRANSFER DETAIL
Scale 1½" = 1'-0"



SECTION B-B
Scale: 1½" = 1'-0"

Notes: 1. Horizontal dimensions shown in Hinge Detail are @ 50°F under Full Dead Load.
2. At each Hinge 4 of 13/16" Pin Plates are identical & 4 of ⅞" Pin Plates are identical.
3. After the erection of all structural steel 2 of 15 C50#, at each end of suspended span, to be held parallel & bearing evenly against 15 C 50# at end of cantilevers in this position they are to be welded to 13" x ¾" cover plate as shown.
4. The pin shall conform to A.S.T.M. Designation A108, any grade from 1016 to 1025 inclusive.

THE CLARKESON ENGINEERING CO., INC.

DESIGN R F	CHECK J M	BRIDGE NO.
DRAWN D E S	APPROVED W.H.C. J.M.	SURVEY PLOT

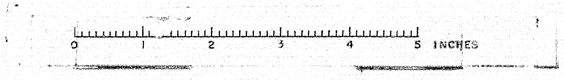
STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM & QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY
HINGE AND WIND TRANSFER DETAILS

SHEET 16 OF 23 SHEETS — AUGUSTA, MAINE

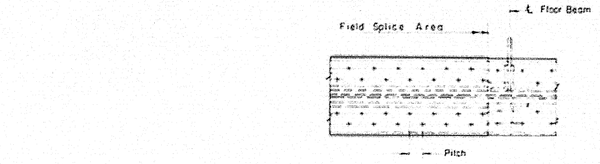
78-190

K-E PROVENCE BLVD. ITS © PRINTED IN U.S.A. INC. 49532

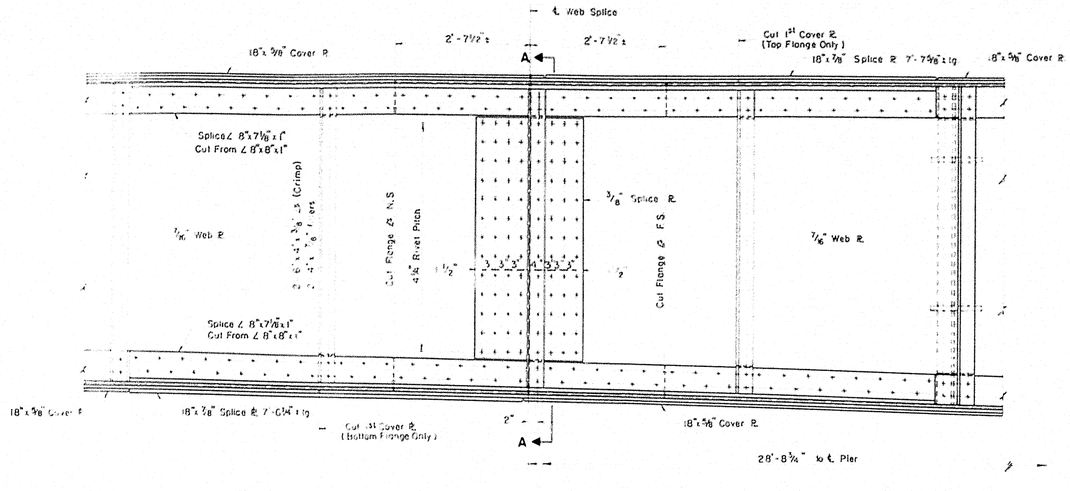


B.P.R. REG. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-6(23)	26	32

WATERVILLE INTERSTATE

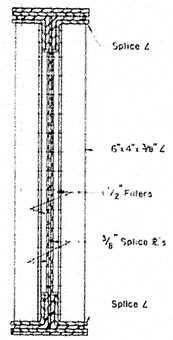


RIVET ARRANGEMENT



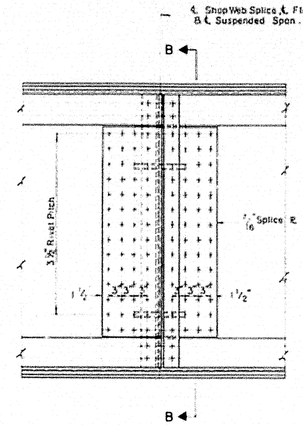
FIELD SPLICE DETAIL

Scale: ¾" = 1'-0"



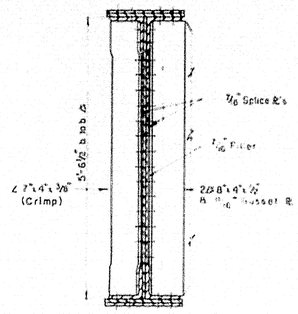
SECTION A-A

Scale ¾" = 1'-0"



SHOP WEB SPLICE DETAIL

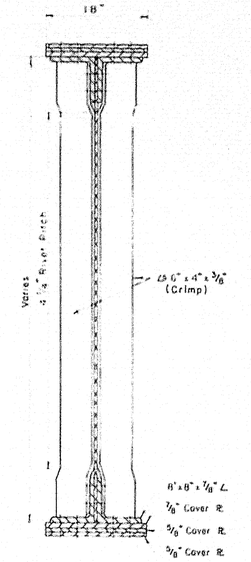
Scale ¾" = 1'-0"



SECTION B-B

Scale ¾" = 1'-0"

Note For location of sections 3-3 & 4-4 see sheet 17



SECTION 4-4

TYPICAL GIRDER SECTION

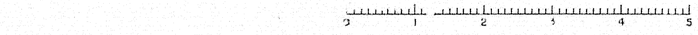
Scale 1" = 1'-0"

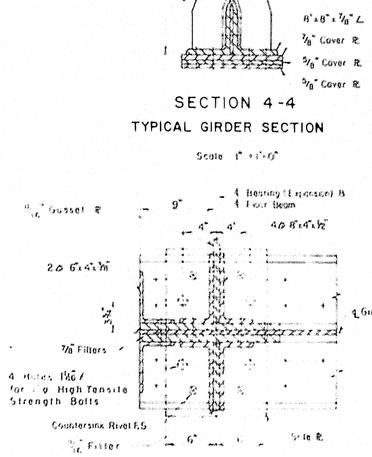
ELEVATION OF BOTTOM OF ROADWAY SLAB									
SOUTHBOUND BRIDGE					NORTHBOUND BRIDGE				
STATION	15'-0" LT. & RT.	9'-0" LT. & RT.	3'-0" LT. & RT.		STATION	15'-0" LT. & RT.	9'-0" LT. & RT.	3'-0" LT. & RT.	
1048+70.00	162.26	162.91	161.02		1047+49.00	159.34	159.58	159.06	
1048+60.32	162.17	162.82	160.93		1047+39.32	159.24	159.48	159.02	
1048+50.00	162.56	162.74	160.84		1047+29.00	159.15	159.38	158.98	
1048+40.64	162.96	162.65	160.75		1047+20.64	159.05	159.46	158.94	
1048+10.96	163.41	162.56	160.66		1046+90.96	158.95	159.11	158.91	
1047+81.61	163.32	162.47	160.57		1046+81.61	158.85	159.00	158.91	
1047+31.21	163.23	162.38	160.48		1046+31.21	158.75	158.90	158.91	
1047+41.41	163.14	162.29	160.40		1046+31.41	158.65	158.81	158.91	
1047+51.61	163.06	162.21	160.31		1046+41.61	158.56	158.71	158.92	
1047+61.81	162.98	162.13	160.24		1046+51.81	158.47	158.62	158.92	
1047+72.00	162.91	162.07	160.17		1046+62.00	158.39	158.55	158.93	
1047+82.18	162.85	162.00	160.11		1046+72.18	158.32	158.47	158.93	
1047+96.37	162.76	161.90	160.04		1046+86.37	158.25	158.40	158.91	
1048+08.04	162.79	161.95	160.05		1046+98.04	158.24	158.39	158.90	
1048+28.58	162.77	161.93	160.03		1047+18.58	158.21	158.36	158.89	
1048+39.32	162.75	161.91	160.01		1047+29.32	158.17	158.32	158.88	
1048+49.66	162.73	161.89	159.99		1047+39.66	158.14	158.29	158.87	
1048+90.00	162.71	161.86	159.97		1047+80.00	158.10	158.25	158.85	
1049+00.34	162.68	161.83	159.94		1047+90.34	158.05	158.20	158.81	
1049+08.68	162.64	161.79	159.90		1047+98.68	158.02	158.15	158.76	
1049+71.02	162.60	161.76	159.86		1048+61.02	157.95	158.10	158.70	
1049+81.36	162.56	161.72	159.82		1048+71.36	157.89	158.05	158.65	
1049+91.81	162.56	161.71	159.82		1048+81.64	157.88	158.04	158.64	
1050+02.32	162.54	161.70	159.80		1048+92.32	157.88	158.00	158.60	
1050+08.00	162.54	161.70	159.80		1048+98.00	157.82	157.96	158.00	
1051+18.20	162.55	161.70	159.81		1049+08.20	157.82	157.97	158.07	
1051+28.40	162.57	161.72	159.83		1049+18.40	157.82	157.97	158.08	
1051+38.60	162.60	161.75	159.86		1049+28.60	157.83	157.98	158.09	
1051+48.80	162.63	161.78	159.85		1049+38.80	157.84	158.00	158.10	
1051+59.00	162.66	161.82	159.92		1049+49.00	157.86	158.01	158.11	
1051+69.20	162.70	161.85	159.96		1049+59.20	157.87	158.02	158.13	
1051+79.40	162.73	161.88	160.00		1049+69.40	157.88	158.04	158.14	
1051+89.60	162.76	161.92	160.02		1049+79.60	157.90	158.05	158.15	
1051+99.80	162.79	161.95	160.05		1049+89.80	157.90	158.06	158.16	
1052+10.00	162.83	161.98	160.08		1050+00.00	157.92	158.07	158.16	

ELEVATION OF BOTTOM OF ROADWAY SLAB																					
Brg No.	℄ Bearings*	¼ Point	½ Point	¾ Point	℄ Bearings	Brg No.	℄ Bearings*	¼ Point	½ Point	¾ Point	℄ Bearings	Brg No.	℄ Bearings*	¼ Point	½ Point	¾ Point	℄ Bearings	Brg No.	℄ Bearings*	¼ Point	½ Point	¾ Point	℄ Bearing
21	166.74	166.01	166.19	166.31	166.42	41	157.86	158.05	158.19	158.29	158.36	61	161.48	161.94	162.37	162.70	163.10
22	166.81	166.21	166.39	166.51	166.59	42	158.07	158.25	158.36	158.46	158.49	62	161.65	162.13	162.57	162.95	163.29
23	166.89	166.29	166.47	166.59	166.67	43	158.15	158.33	158.47	158.54	158.57	63	161.73	162.21	162.65	163.03	163.37
24	166.96	166.36	166.54	166.66	166.74	44	158.27	158.45	158.58	158.68	158.71	64	161.85	162.33	162.77	163.15	163.49
25	167.04	166.44	166.61	166.73	166.81	45	158.36	158.54	158.67	158.77	158.80	65	161.96	162.44	162.87	163.26	163.60
26	167.12	166.51	166.68	166.80	166.88	46	158.51	158.66	158.77	158.92	159.03	66	163.13	163.68	164.20	164.66	165.08
27	167.20	166.59	166.76	166.88	166.96	47	158.56	158.75	158.96	159.11	159.22	67	163.32	163.88	164.40	164.85	165.26
28	167.28	166.66	166.83	166.95	167.03	48	158.58	158.83	159.05	159.20	159.30	68	163.40	163.96	164.48	164.93	165.33
29	167.36	166.74	166.91	167.03	167.11	49	158.56	158.75	158.96	159.11	159.22	69	163.32	163.88	164.40	164.85	165.26
30	167.44	166.81	166.98	167.10	167.18	50	158.31	158.56	158.77	158.92	159.03	70	163.13	163.68	164.20	164.66	165.08
31	167.52	166.89	167.06	167.18	167.26	51	159.05	159.37	159.66	159.89	160.08	71	165.11	165.74	166.33	166.87	167.36
32	167.60	166.96	167.13	167.25	167.33	52	159.24	159.57	159.86	160.08	160.27	72	165.30	165.94	166.53	167.08	167.58
33	167.68	167.04	167.21	167.33	167.41	53	159.32	159.65	159.94	160.16	160.35	73	165.38	166.02	166.61	167.14	167.63
34	167.76	167.12	167.29	167.41	167.49	54	159.24	159.57	159.86	160.08	160.27	74	165.30	165.94	166.53	167.06	167.55
35	167.84	167.19	167.36	167.48	167.56	55	159.05	159.37	159.66	159.89	160.08	75	165.11	165.74	166.33	166.87	167.36
36	167.92	167.27	167.44	167.56	167.64	56	160.10	160.50	160.86	161.17	161.43	76	167.90	168.69	168.74	169.34	169.85
37	168.00	167.34	167.51	167.63	167.71	57	160.29	160.69	161.06	161.36	161.62	77	167.59	168.29	168.84	169.53	170.14
38	168.08	167.42	167.59	167.71	167.79	58	160.37	160.78	161.14	161.44	161.70	78	167.68	168.37	169.02	169.61	170.19
39	168.16	167.49	167.66	167.78	167.86	59	160.29	160.69	161.06	161.36	161.62	79	167.59	168.29	168.84	169.53	170.14
40	168.24	167.57	167.74	167.86	167.94	60	160.10	160.50	160.86	161.17	161.43	80	167.40	168.09	168.74	169.34	169.85

* Low station end of beam.

Note. After the structural steel is erected and before forms are built or concrete is placed, elevations on the top flange of the beams are to be obtained at the points indicated in the table. The difference between these elevations and those shown in the table give the actual blocking distance from top of beam to bottom of slab. See Haunch Detail sheet 16.





SECTION 3-3

Scale 1" = 1'-0"

THE CLARKESON [illegible] CO., INC

DESIGN R.F.	CHECKED [illegible]	QUANTITY [illegible]
DRAWN E.K.	APPROVED [illegible]	

STATE HIGHWAY COMMISSION

INTERSTATE #95
OVER
MESSALONSKEE STREAM
& QUARRY ROAD (RELOC.)
IN THE CITY OF
WATERVILLE
KENNEBEC COUNTY

SPLICE DETAILS & SECTIONS

SHEET 19 OF 23 SHEETS AUGUSTA, MAINE

78-191