F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(95)50	405	515

GENERAL NOTES

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES AND INTERIM SPECIFICATIONS 1984.

CONTRACT SPECIFICATIONS: STATE OF MAINE, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, HIGHWAYS AND BRIDGES, REVISION OF JANUARY, 1984.

DESIGN LOADING:
LIVE LOAD - HS25.
FUTURE WEARING SURFACE - 25 P.S.F.

MATERIALS:
CONCRETE:
SUPERSTRUCTURE, EXCEPT CURBS AND MEDIAN BARRIER - CLASS P.
ALL OTHER CONCRETE SHALL BE CLASS A.
REINFORCING STEEL: ASTM A615, GRADE 60.
PRESTRESSING STEEL: ASTM A416, GRADE 270.
STRUCTURAL STEEL: ASTM A36 (UNLESS OTHERWISE NOTED).

BASIC DESIGN STRESSES:
CONCRETE:
CLASS A F'_C = 3000 PSI
CLASS P F'_C = 5000 PSI
F'_{CI} = 4500 PSI AT TIME OF PRESTRESSING

REINFORCING STEEL: F_Y = 60.000 PSI
PRESTRESSING STEEL: F'_S = 270.000 PSI

CONSTRUCTION:
ALL REINFORCEMENT SHALL BE EPOXY COATED.

CONCRETE COVER FOR REINFORCEMENT SHALL BE 2 INCHES UNLESS OTHERWISE SHOWN.

EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 1/2" UNLESS OTHERWISE SHOWN.

SURFACES DESIGNATED ON THE PLANS OR IN THE SPECIFICATIONS TO RECEIVE A RECESSED FINISH SHALL BE RECESSED 1-1/2".

PROTECTIVE COATING FOR CONCRETE SURFACES SHALL BE APPLIED TO THE FOLLOWING AREAS:

EXPOSED HORIZONTAL AND VERTICAL SURFACES OF CURB AND FASCIA.
CONCRETE END POSTS, CONCRETE BARRIER.
TOP AND BACK OF ABUTMENT BACKWALLS TO 1 FT. BELOW TOP.

FORMWORK SHALL BE REMOVED FROM INSIDE OF BOX GIRDERS. NUMBER AND LOCATION OF TOP SLAB CONSTRUCTION JOINTS FOR THIS PURPOSE SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL.

CONCRETE IN CURBS SHALL NOT BE PLACED UNTIL ALL POST-TENSIONING HAS BEEN COMPLETED.

POST-TENSIONING:
DETAILS ON THE PLANS ARE BASED ON TENDONS CONSISTING OF 0.6-INCH STRANDS IN GALVANIZED, SEMI-RIGID, SPIRAL FERROUS METAL DUCT HAVING A FRICTION CURVATURE COEFFICIENT μ = 0.25 AND A FRICTION WOBBLE COEFFICIENT K = 0.0002.

THE DESIGN IS BASED ON GRADE 270 STRAND TENSIONED TO 0.75 F'_S AND ANCHORED AT AN EQUIVALENT ANCHOR SET OF 1/4-INCH.

BEGINNING WITH THE END BEAM TENDONS, ALL TRANSVERSE TENSIONING SHALL BE COMPLETED BEFORE TENSIONING THE MAIN LONGITUDINAL GIRDER TENDONS. SEQUENCE OF TENSIONING SHALL BE AS INDICATED ON THE PLANS.

All anchorage assemblies were painted w/ ZRC to prevent water seepage.

FOUNDATION PILES: FOUNDATION PILES ARE HP14x73 (OR HP13x73 AT THE OPTION OF THE CONTRACTOR) HAVING A DESIGN BEARING VALUE OF 128 TONS. PILES SHALL BE DRIVEN TO REFUSAL ON ROCK. POINTED REINFORCED PILE TIPS SHALL BE USED FOR ALL PILES.

PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	RC	
CHECKED	BCA	
REVISIONS		
FIELD CHANGES		

BRUNING 44-132-45710-1

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
203.25	GRANULAR BORROW	C.Y.	2630
501.216	STEEL H-BEAM PILES - 73 LBS./FT.	L.F.	3,620
*502.21	STRUCTURAL CONCRETE, ABUTMENTS AND RETAINING WALLS	C.Y.	1,320
502.3103	STRUCTURAL CONCRETE, APPROACH SLABS	L.S.	1
502.482	STRUCTURAL CONCRETE, CURBS AND SIDEWALKS	C.Y.	20
503.14	EPOXY COATED REINFORCING STEEL, FABRICATED AND DELIVERED	LBS.	285,700
503.15	EPOXY COATED REINFORCING STEEL, PLACING	LBS.	285,700
507.092	ALUMINUM BRIDGE RAILING, 2 BAR	L.F.	298
512.08	FRENCH DRAINS	L.F.	280
514.06	CURING BOX FOR CONCRETE CYLINDERS	EA.	1
515.2103	PROTECTIVE COATING FOR CONCRETE SURFACES	L.S.	1
516.2103	LATEX MODIFIED CONCRETE WEARING SURFACE ON BRIDGE	L.S.	1
520.21	EXPANSION DEVICE - GLAND SEAL	EA.	2
523.10	POT BEARINGS	EA.	8
526.31	PERMANENT CONCRETE BARRIER - TYPE II	L.F.	155
535.72	PRESTRESSED CONCRETE SUPERSTRUCTURE I-295 MAINLINE BRIDGE	L.S.	1
609.13	VERTICAL BRIDGE CURB - TYPE 1	L.F.	320
609.133	VERTICAL BRIDGE CURB - SPECIAL	L.F.	294

APPROXIMATE QUANTITIES IN LUMP SUM PAY ITEMS:

502.3103	STRUCTURAL CONCRETE APPROACH SLABS STRUCTURAL CONCRETE, CLASS A	C.Y.	66
535.72	PRESTRESSED CONCRETE SUPERSTRUCTURE, I-295 MAINLINE BRIDGE STRUCTURAL CONCRETE, CLASS P	C.Y.	1085
	PRESTRESSING STEEL	LBS.	58,000

NOTE:

ACCESS MANHOLES, DRAINS, AND ALL MATERIALS, LABOR, AND EQUIPMENT FOR PRESTRESSING WILL BE CONSIDERED INCIDENTAL TO ITEM 535.72. (QUANTITY SHOWN IS FOR 0.6" DIA. STRAND ONLY.)

*ITEM 502.21 INCLUDES CURBS AND END POSTS ON ABUTMENTS.

INDEX OF SHEETS

DESCRIPTION	SHEET NO.
INDEX, GENERAL NOTES AND QUANTITIES	1
PLAN & ELEVATION	2
ABUTMENT 1	3-7
ABUTMENT 2	8-12
TRANSVERSE SECTION	13
CROSS-SECTION - REINFORCEMENT	14
BOTTOM SLAB REINFORCEMENT	15-16
TOP SLAB REINFORCEMENT	17-18
TOP SLAB - PRESTRESSING	19-20
WEB REINFORCEMENT	21
GIRDER PRESTRESSING	22
END BEAMS	23-24
TENDON ANCHORAGE DETAILS	25
BEARINGS	26
CURB & BARRIER DETAILS	27
EXPANSION JOINTS	28-30
CONSTRUCTION DETAILS	31
DECK & SOFFIT ELEVATIONS	32
REINFORCING STEEL (BAR LIST)	33-37
STANDARD DETAILS (BRIDGE):	
BD114-81 - ALUMINUM BRIDGE RAILING	38
BD120-81 - CONCRETE END POSTS	39
BD126-81 - MISC. DETAILS - APPROACH SLABS	40
BD127-81 - MISC. DETAILS - PILE SPLICES & TIPS	41
SUBSURFACE SOILS DATA	42-43

102-140
REVISED AS BUILT BY PLB 1-91

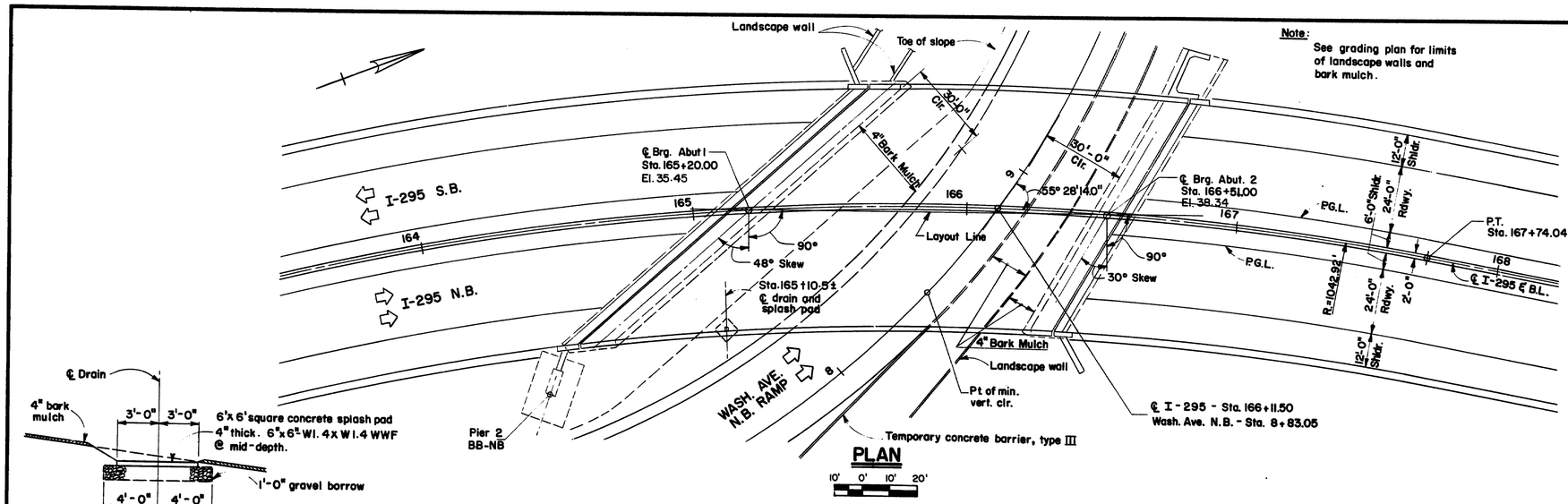
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

INDEX, QUANTITIES & GENERAL NOTES

SHEET 1 OF 43 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3955(0)	406	515



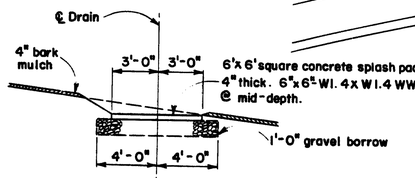
PLAN

10' 0' 10' 20'

Note:
See grading plan for limits of landscape walls and bark mulch.

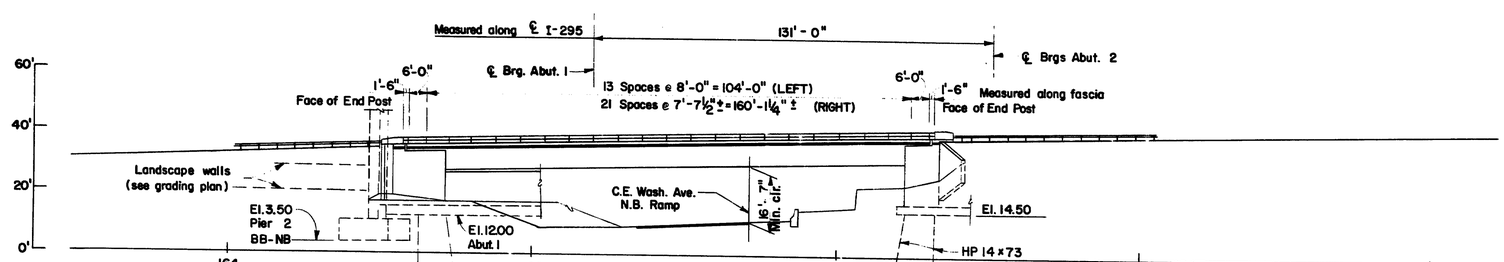
Curve Data : I-295

Δ = 35° 51' 43.3" R
D = 5° 29' 37.6"
R = 1042.9200'
T = 337.4774'
E = 53.2429'
L = 652.7744'
S = 0.06 ¹/ft.



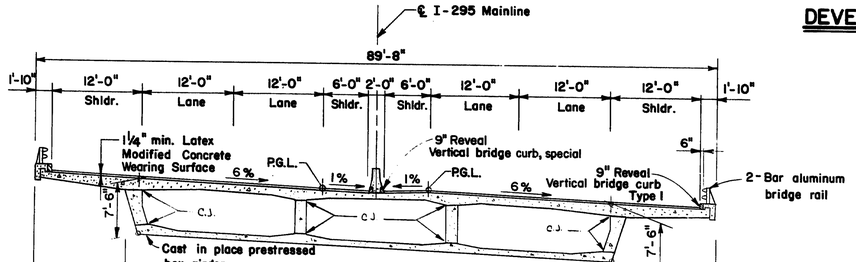
SPLASH PAD
No Scale

No direct payment - incidental to item 513.09, Concrete Slope Protection (Baxter Blvd. Southbound). Final elevation and orientation will be determined by the Engineer.



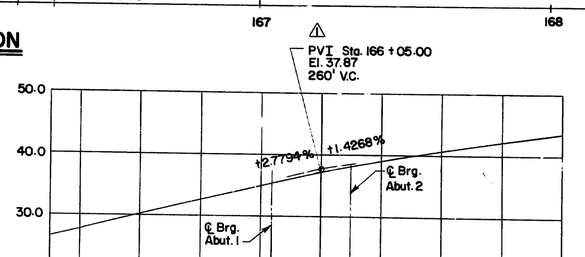
DEVELOPED ELEVATION

10' 0' 10' 20'



TRANSVERSE SECTION

1' 0' 2' 4' 6' 8' 10'



PROFILE GRADE ℄ I-295 M.L.

102-141

REVISED AS BUILT BY PLB 1-91

PROJECT DESIGN REMINDER
PLANS
DESIGN - DETAILED — BY: BSP — DATE: 11-85
CHECKED — BY: DAG
REVISIONS — BY: ZAP
FIELD CHANGES

BRUNING 44-132 45710-1

WRIGHT-PIERCE
WILBUR SMITH & ASSOCIATES INC.
T. Y. LIN INTERNATIONAL
HALEY & ALDRICH, INC., AMES ASSOC.

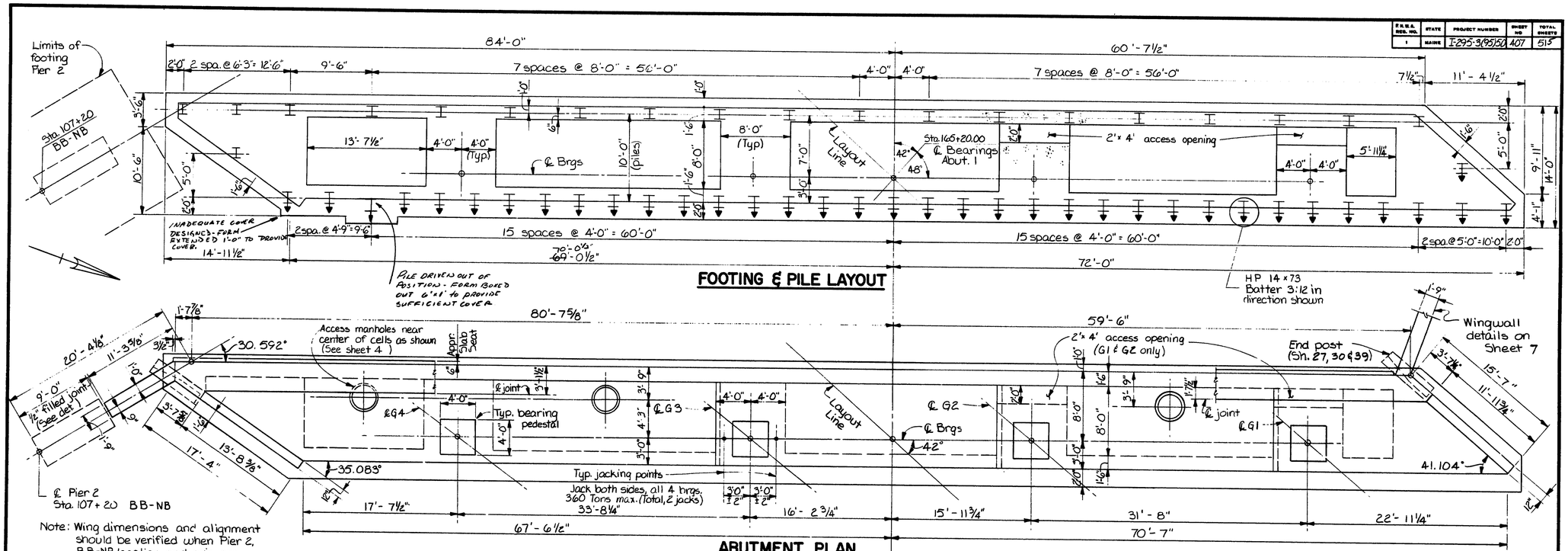
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

PLAN AND ELEVATION

SHEET 2 OF 43 AUGUSTA, MAINE JAN. 1985

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(95)50	407	513



Note: For details of curbs, end posts and permanent concrete barrier on abutments, see sheets 27, 30 and 39.

* Brg. pedestal elevations are tentative, depending on bearings furnished. See sheet 26.

See sheet 32 for backwall elevations not shown.

PROJECT DESIGN ENGINEER	BY	DATE
PLANS	DESIGN - DETAILED RBC AG.	11-85
	CHECKED BCA	
	REVISIONS	
	FIELD CHANGES	

DRAWING 44-132-457101

102-142

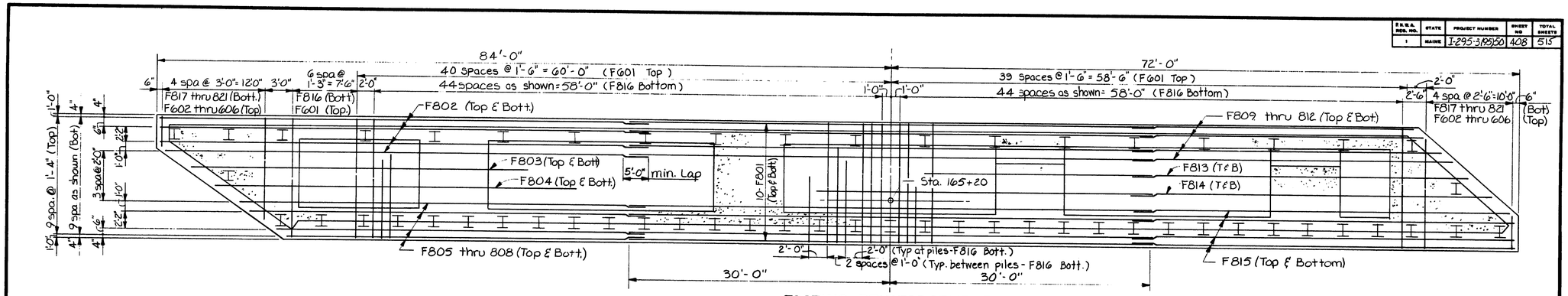
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

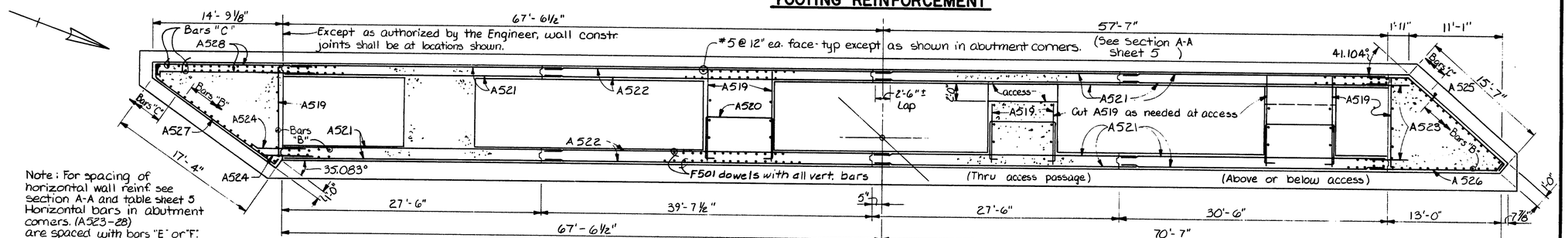
ABUTMENT 1 - LAYOUT

SHEET 3 OF 43 AUGUSTA, MAINE

F.A.S.& REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(15)50	408	515

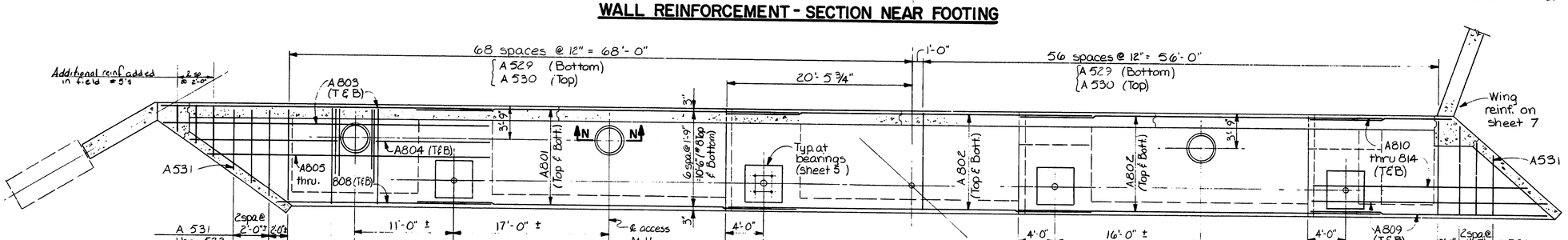


FOOTING REINFORCEMENT



Note: For spacing of horizontal wall reinf. see section A-A and table sheet 5 Horizontal bars in abutment corners. (A523-28) are spaced with bars "E" or "F".

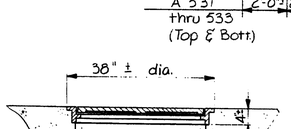
WALL REINFORCEMENT - SECTION NEAR FOOTING



SLAB REINFORCEMENT - SECTION AT BRIDGE SEAT

0 1 2 3 4 5 6

Wall reinf. not shown - see sheets 5-7



SECTION N-N

NO SCALE

Access Man hole — 3 requ'd Abut. 1; 2 requ'd Abut. 2

Gray iron casting, with drop handle and Lock, Approx. wt. 295 lbs. No direct payment; will be considered incidental to item 502.21

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	RBC	11-85
	CHECKED	AG	
	REVISIONS	RSA	
	FIELD CHANGES		

DRAWING 44-132 457.10-1

Revised as built by PJB 1-91

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

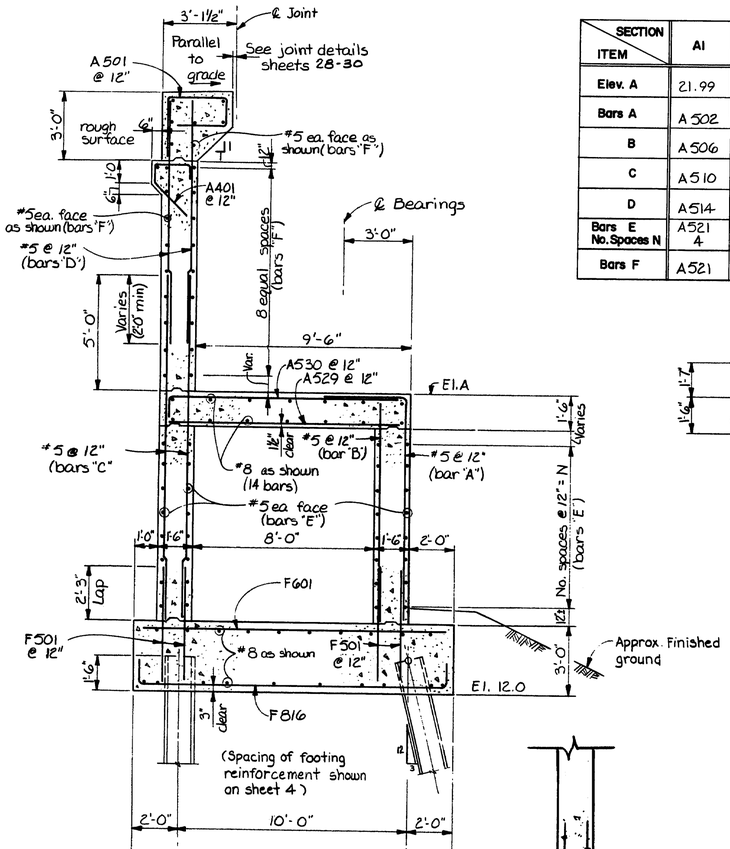
I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

ABUTMENT 1 REINFORCEMENT

SHEET 4 OF 43 AUGUSTA, MAINE

102-143

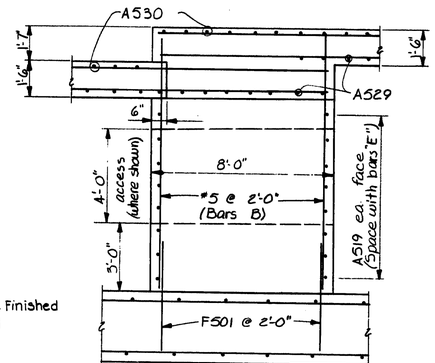
F.H.W.A. DOCUMENT NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	409	515



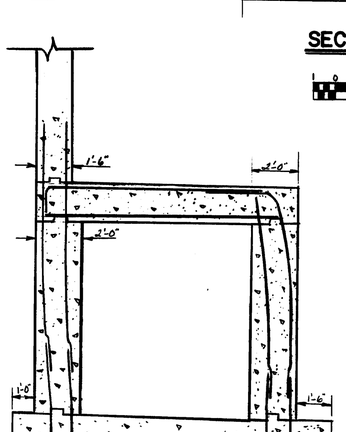
SECTION A-A

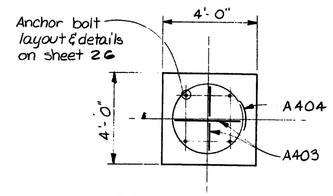
DETAILS TYPICAL FOR SECTIONS A1 THRU A5. SEE TABLE FOR BARS A THRU F.
(Sections on Sheet 3)

SECTION / ITEM	A1	A2	A3	A4	A5
Elev. A	21.99	21.99	23.49	24.99	26.49
Bars A	A502	A502	A503	A504	A505
B	A506	A506	A507	A508	A509
C	A510	A510	A511	A512	A513
D	A514	A515	A516	A517	A518
Bars E No. Spaces N	A521 4	A522 4	A521 7	A521 8	A521 8
Bars F	A521	A522	A521	A521	A521

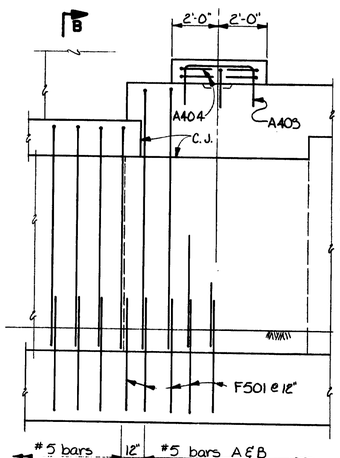


SECTION C-C

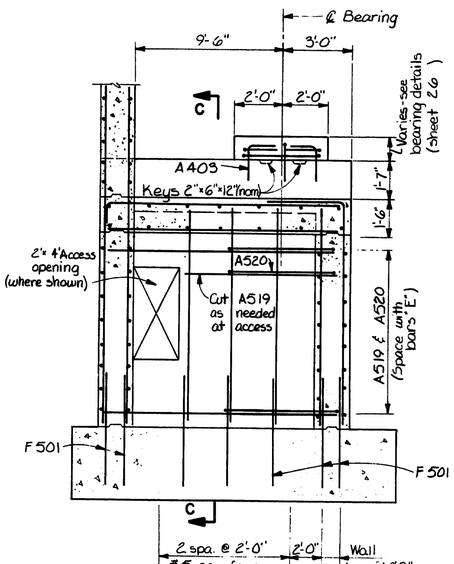




BEARING PEDESTAL
(PLAN)
(Typ. both abutments)



B PART ELEVATION AT GIRDER BEARINGS
FOR REINFORCEMENT NOT SHOWN, SEE SECTION A-A



SECTION B-B

Note: Dowels out of footing were improperly installed, transposed 6" ahead. Consequently breastwall "back" was increased 6" in depth. Vertical bars were then bent back to enter top slab & backwall in proper location. This section shows only those bars affected for clarity- all other steel was placed as per plans. PLB 1-91

102-144

REVISED AS BUILT BY PLB 1-91

PROJECT: BRIDGE ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	JSC / AG.	11-85
CHECKED	RSA	
REVISIONS		
FIELD CHANGES		

BRIDGE 44-152 457101

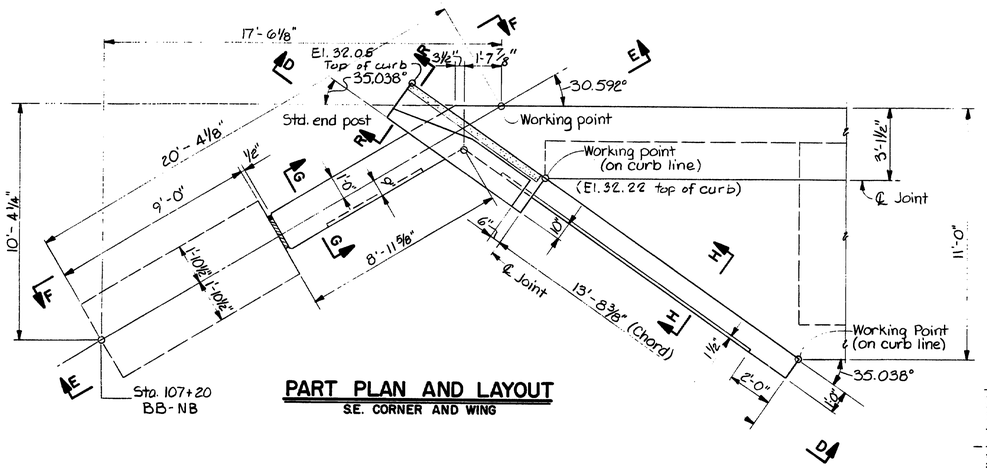
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

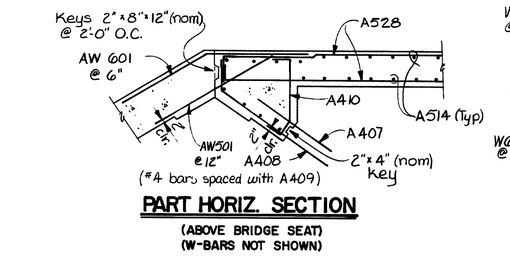
ABUTMENT 1 - DETAILS (1)

SHEET 5 OF 43 AUGUSTA, MAINE

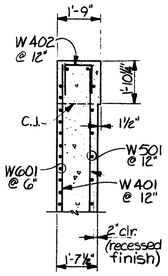
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(95)50	410	616



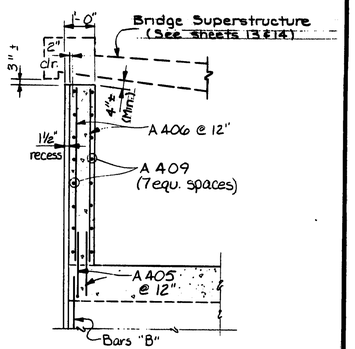
PART PLAN AND LAYOUT
S.E. CORNER AND WING



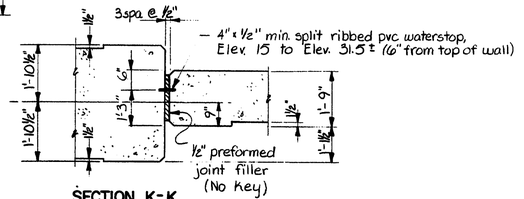
PART HORIZ. SECTION
(ABOVE BRIDGE SEAT)
(W-BARS NOT SHOWN)



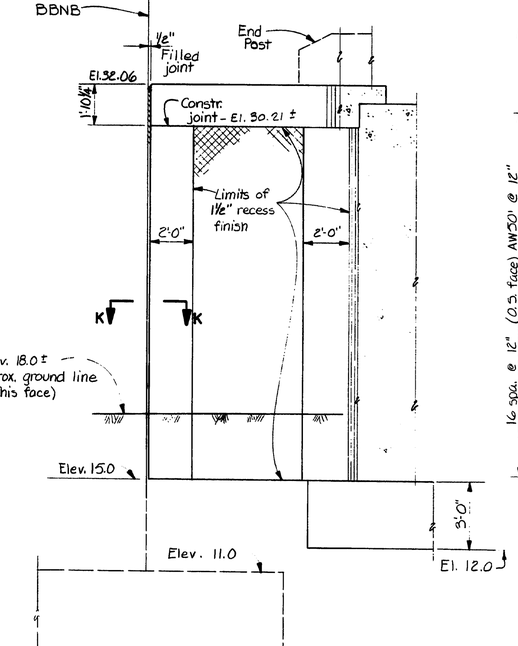
SECTION G-G



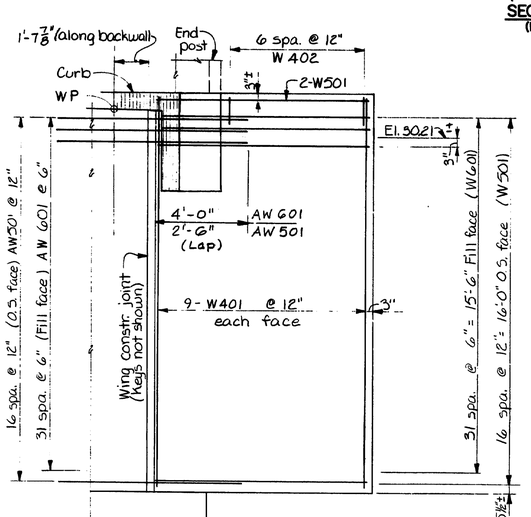
SECTION H-H
Typ. for all curtain walls
(except bar marks)



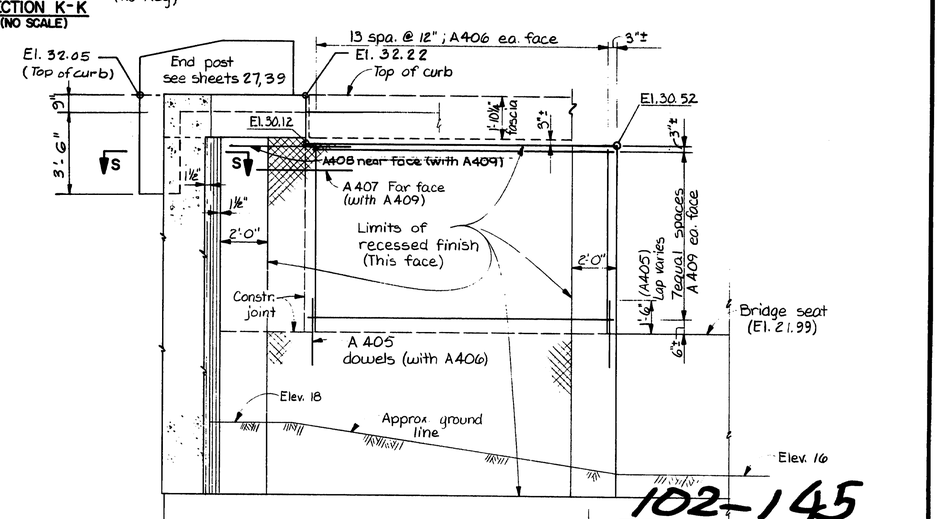
SECTION K-K
(NO SCALE)



SECTION E-E



VIEW F-F



SECTION D-D
1 0 1 2 3

S.E. CORNER & WINGWALL DETAILS

Note: For Sections R-R & SS and curb end details, see sheets 12 & 27.

PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	AG	11-85
CHECKED		
REVISIONS		
FIELD CHANGES		

BRUNING 44-132-45710-1

102-145

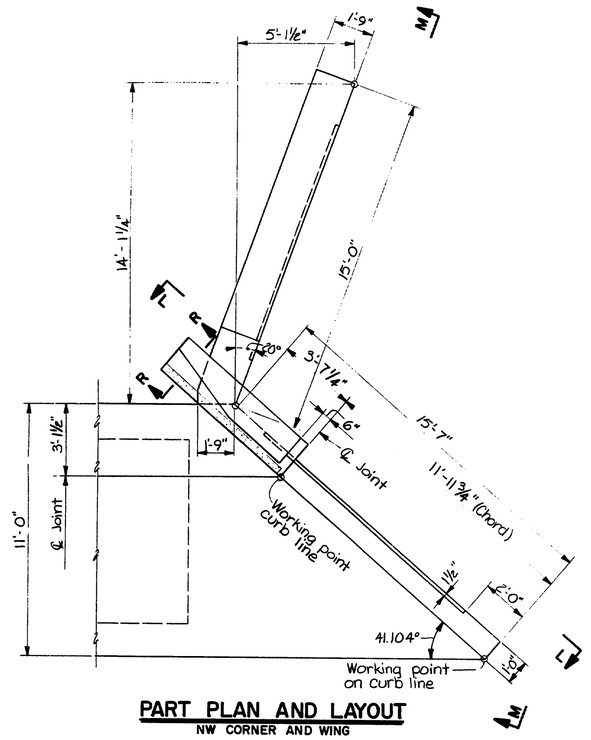
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

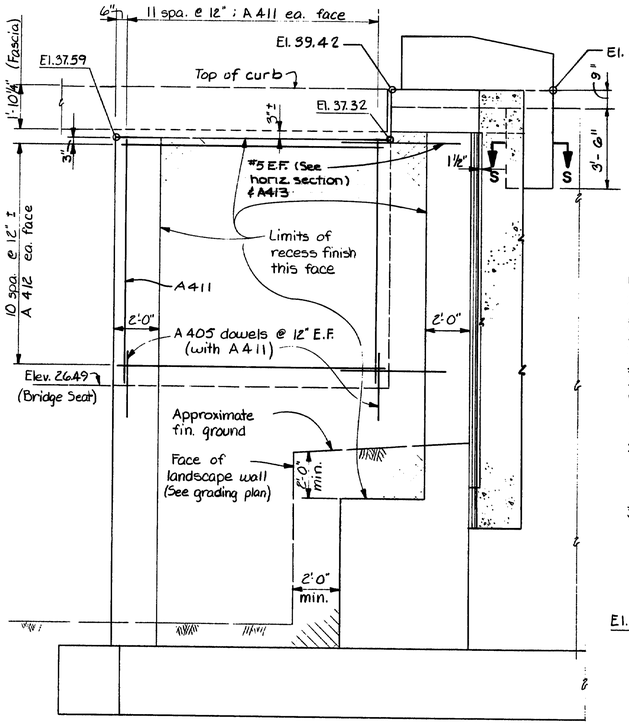
ABUTMENT 1 - DETAILS (2)

SHEET 6 OF 43 AUGUSTA, MAINE

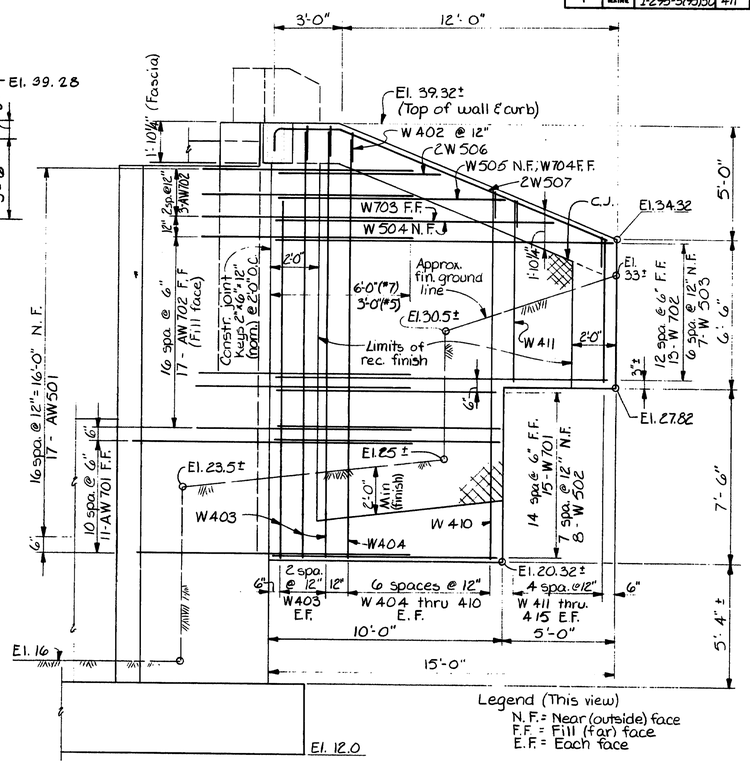
F.H.W.A. REGL. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(95)50	411	515



PART PLAN AND LAYOUT
NW CORNER AND WING

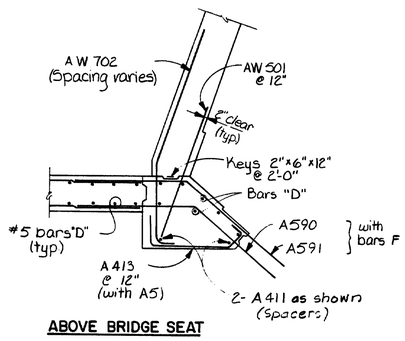


END VIEW
SECTION L-L

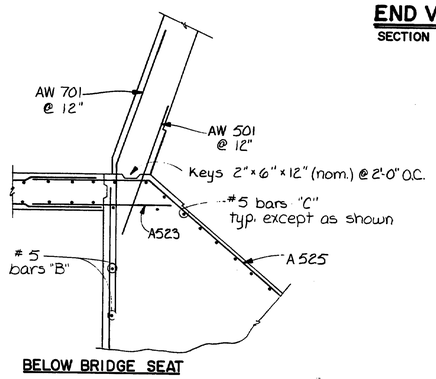


WING ELEVATION
VIEW M-M

Legend (This view)
N.F. = Near (outside) face
F.F. = Fill (far) face
E.F. = Each face



ABOVE BRIDGE SEAT



BELOW BRIDGE SEAT

HORIZONTAL SECTIONS

Note
For Sections R-R & SS and curb end details, see sheets 12 & 27

1 0 1 2 3

102-146

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

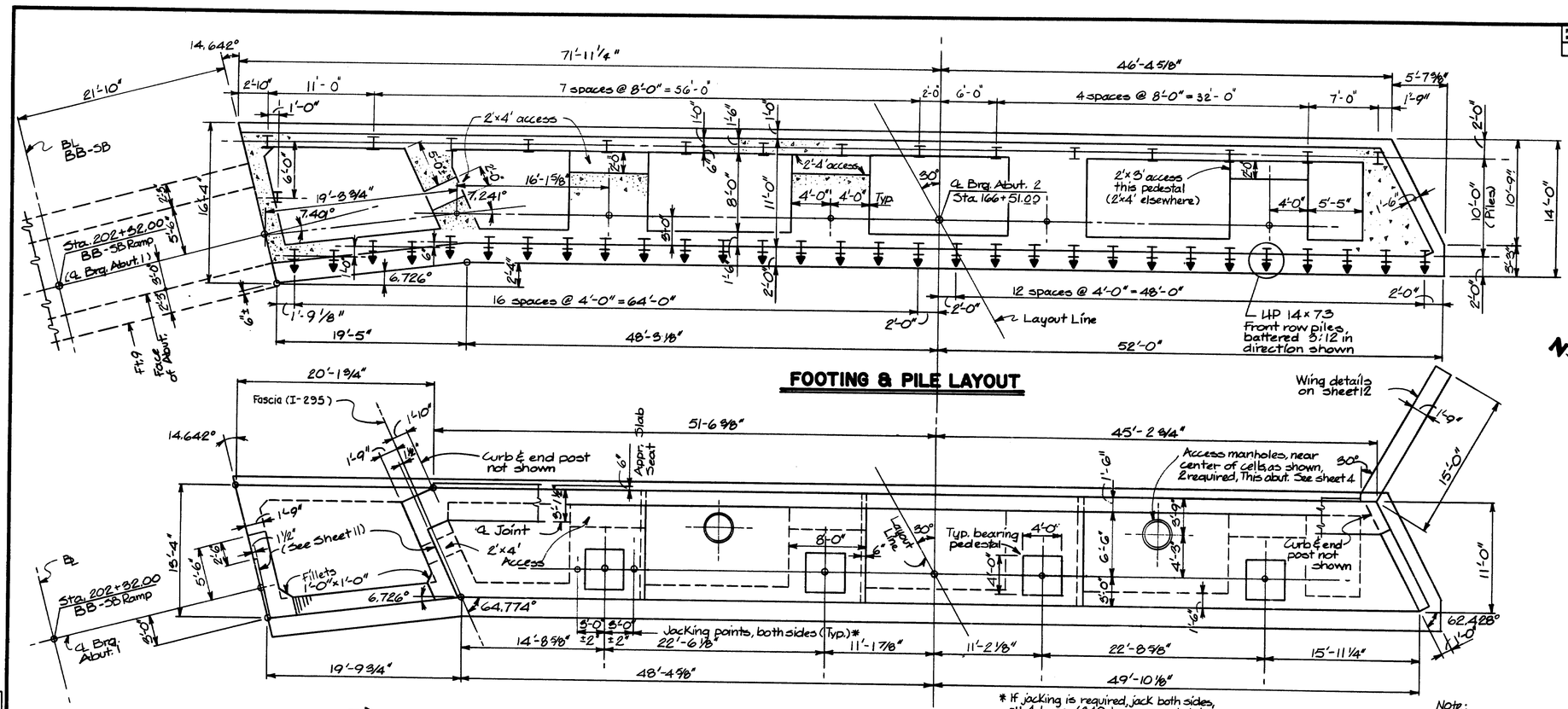
ABUTMENT 1 - DETAILS (3)

SHEET 7 OF 43 AUGUSTA, MAINE

PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	JBC	A.G.	11-25
CHECKED	JSA	
REVISIONS		
FIELD CHANGES		

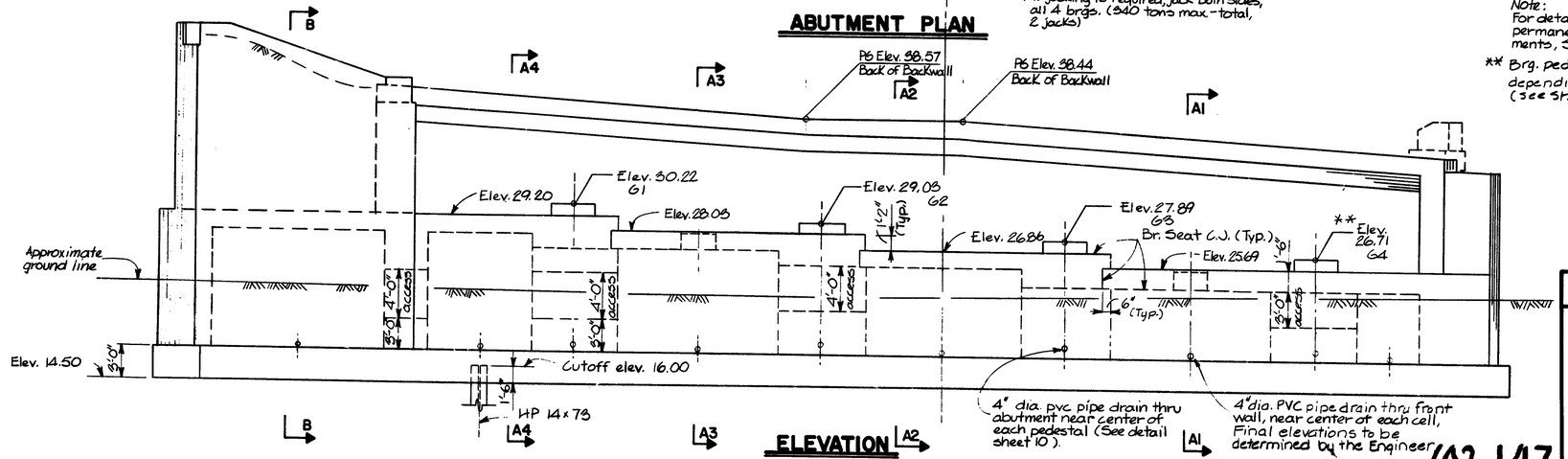
BRUNING 44-132-457101

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(93)50	4/2	50



FOOTING & PILE LAYOUT

ABUTMENT PLAN



ELEVATION

Note:
For details of curbs, end posts and permanent concrete barrier on Abutments, See Sheets 27, 30 & 39

** Brg. pedestal elevations are tentative, depending on bearings furnished. (See Sheet 26)

1 0 1 2 3 4 5 6

PROJECT DESIGN ENGINEER	BY	DATE
PLANS	DESIGN - DETAILED	BRC 11-85
	CHECKED	TH
	REVISIONS	BSH
	FIELD CHANGES	

BRUNING 44-132 457101

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

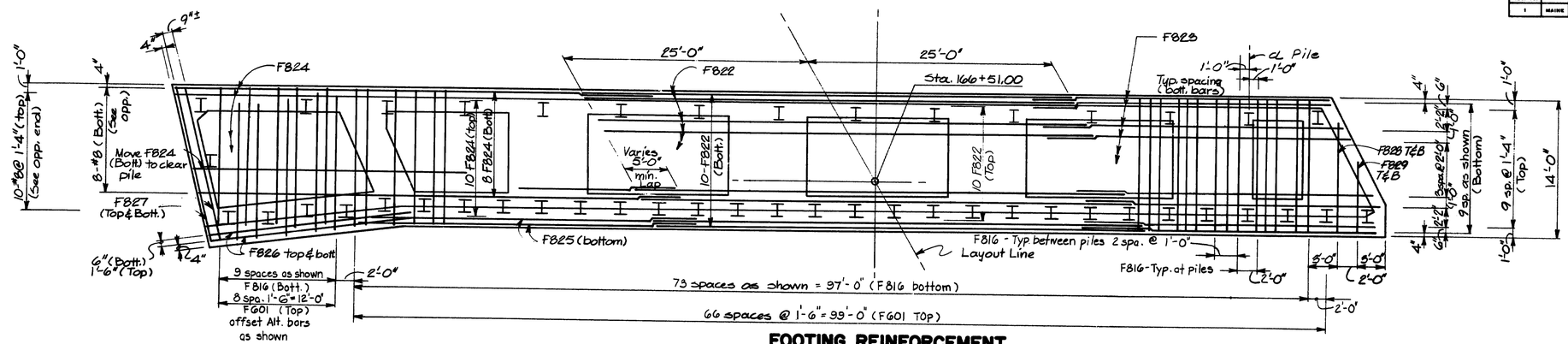
I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

ABUTMENT 2 - LAYOUT

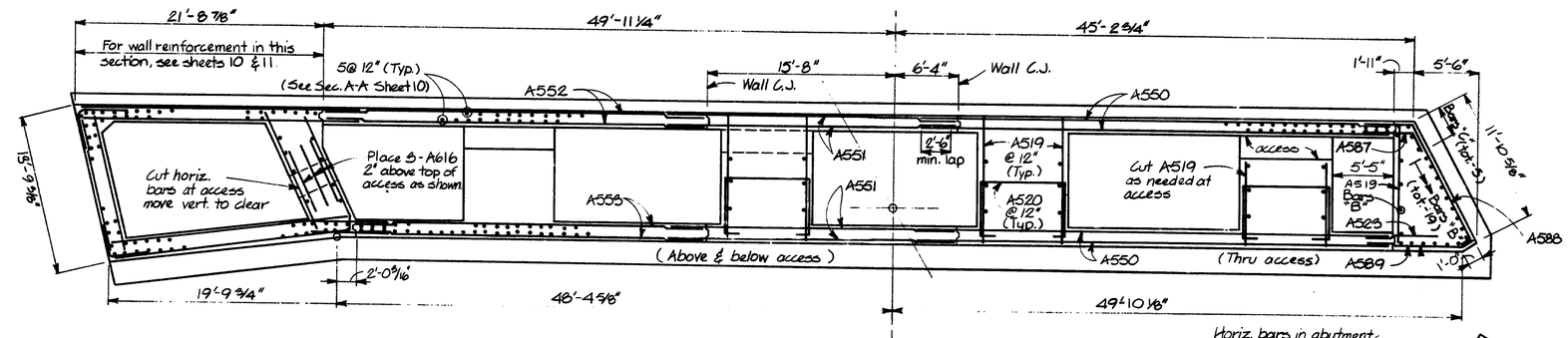
102-147

SHEET 8 OF 43 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(95)50	413	515

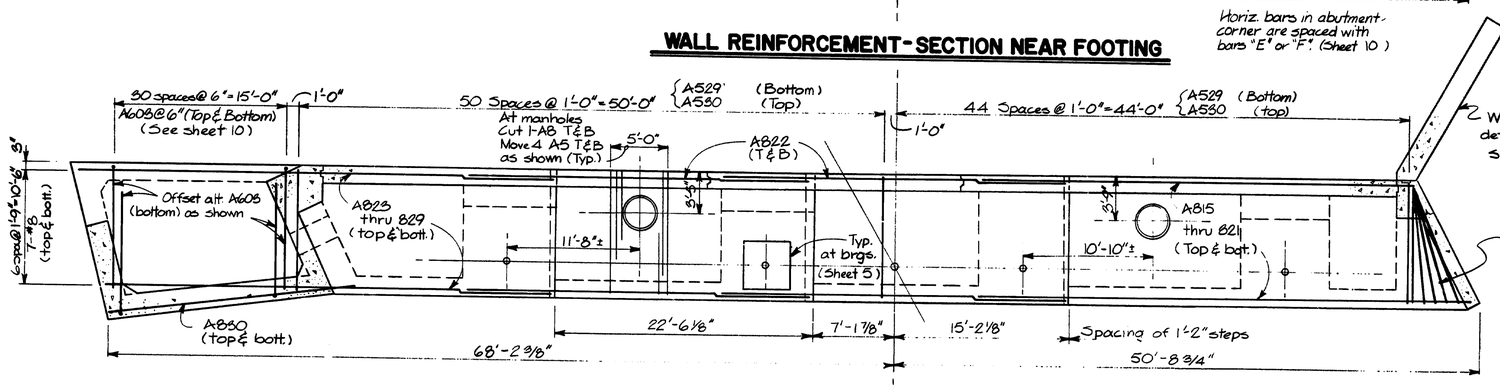


FOOTING REINFORCEMENT



WALL REINFORCEMENT - SECTION NEAR FOOTING

Horiz. bars in abutment corner are spaced with bars "E" or "F" (Sheet 10)



SLAB REINFORCEMENT - SECTION AT BRIDGE SEAT

0 1 2 3 4 5 6

REVISED AS BUILT BY PLB 1-91

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	BSC	11-95
	CHECKED	BSH	
	REVISIONS		
	FIELD CHANGES		

DRAWING 44-132-6710-1

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

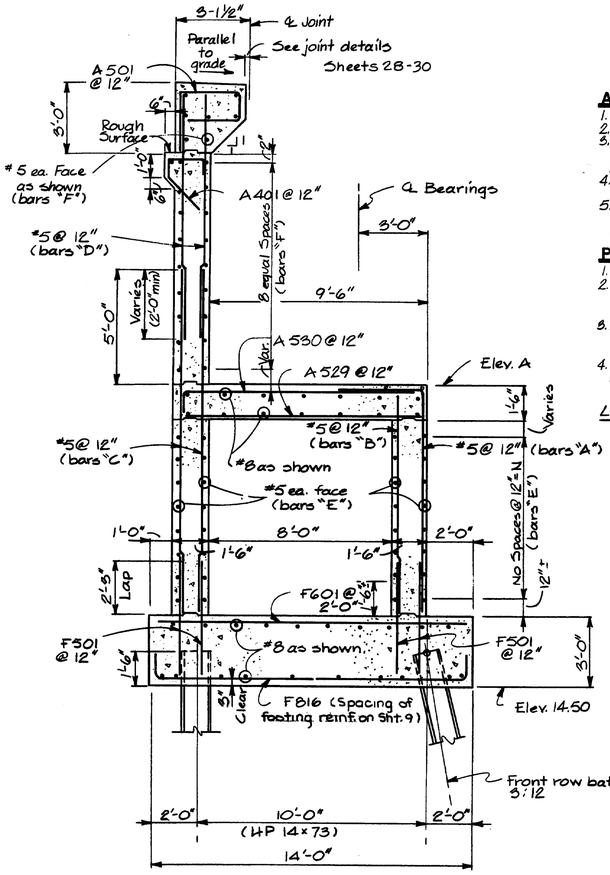
I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

ABUTMENT 2 REINFORCEMENT

SHEET 9 OF 43 AUGUSTA, MAINE

102-148

F.H.W.A. REGN. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(95)50	414	515



SECTION A-A

Details typical for Sections A1 thru A4. See table for bars A thru F.

SECTION / ITEM	A1	A2	A3	A4
Elev. A	25.69	26.86	28.05	29.20
Bars A	A534	A535	A536	A537
B	A538	A539	A540	A541
C	A542	A543	A544	A545
D	A546	A547	A548	A549
Bars E No. Spaces N	A550 5	A551 6	A552* 8	A552* 8
Bars F	A550	A551	A553	A553

*A552 Backwall
A553 Breastwall (See Sheet 9)

NOTES

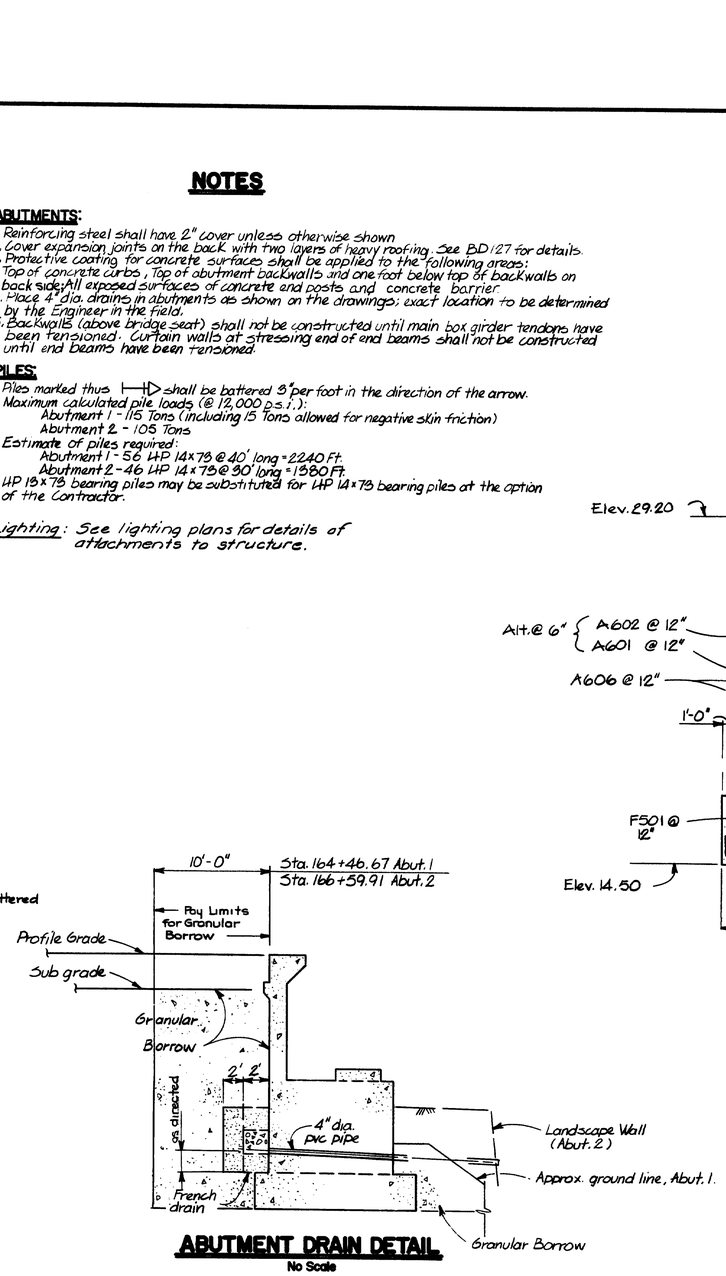
ABUTMENTS:

1. Reinforcing steel shall have 2" cover unless otherwise shown
2. Cover expansion joints on the back with two layers of heavy roofing. See BD 127 for details.
3. Protective coating for concrete surfaces shall be applied to the following areas: Top of concrete curbs, Top of abutment backwalls and one foot below top of backwalls on back side; All exposed surfaces of concrete end posts and concrete barrier
4. Place 4" dia. drains in abutments as shown on the drawings; exact location to be determined by the Engineer in the field.
5. Backwalls (above bridge seat) shall not be constructed until main box girder tendons have been tensioned. Curtain walls at stressing end of end beams shall not be constructed until end beams have been tensioned.

PILES:

1. Piles marked thus ⊢⊳ shall be battered 3" per foot in the direction of the arrow.
2. Maximum calculated pile loads (@ 12,000 p.s.i.):
   Abutment 1 - 115 Tons (including 15 Tons allowed for negative skin friction)
   Abutment 2 - 105 Tons
3. Estimate of piles required:
   Abutment 1 - 56 HP 14x73 @ 40' long = 2240 Ft.
   Abutment 2 - 46 HP 14x73 @ 30' long = 1380 Ft.
4. HP 13x73 bearing piles may be substituted for HP 14x73 bearing piles at the option of the Contractor.

Lighting: See lighting plans for details of attachments to structure.

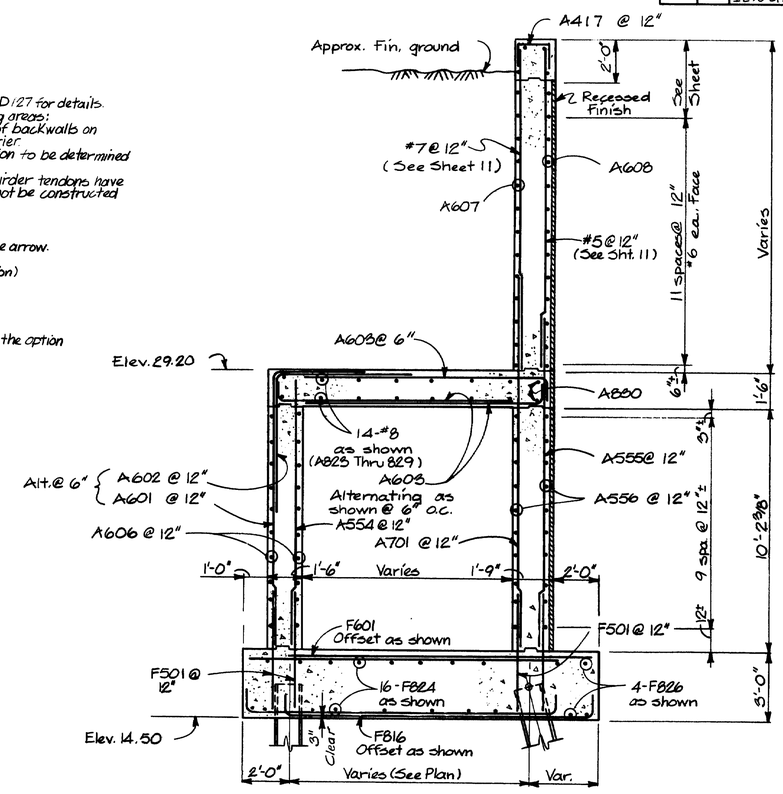


ABUTMENT DRAIN DETAIL

No Scale

Locate drains near center of bearing pedestal, as shown on abutment layout drawings. Final elevations to be determined by the Engineer. Construct french drain in accordance with Section 512 of the specifications. Place 4'x4' filter fabric, back of abutment, centered on drain openings. (No direct payment - incidental to item 5/2.08). Details shown are typical for both abutments, except that, At Abutment 2, extend 4" pvc pipe to face of landscape wall, as directed.

NOTE: French drains were eliminated; replaced w/ Mirafi 140 Geotextile. It spanned the Abutments, lining from footing to approach slab seat elevation. Pipe installed as per plan. typical, both abutments. PLL 1-91



SECTION B-B

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN - DETAILED	BRC	11-85
CHECKED	TH	
REVISIONS	BCH	
FIELD CHANGES		

PLANS

BRUNING 44-132 45710-1

102-149

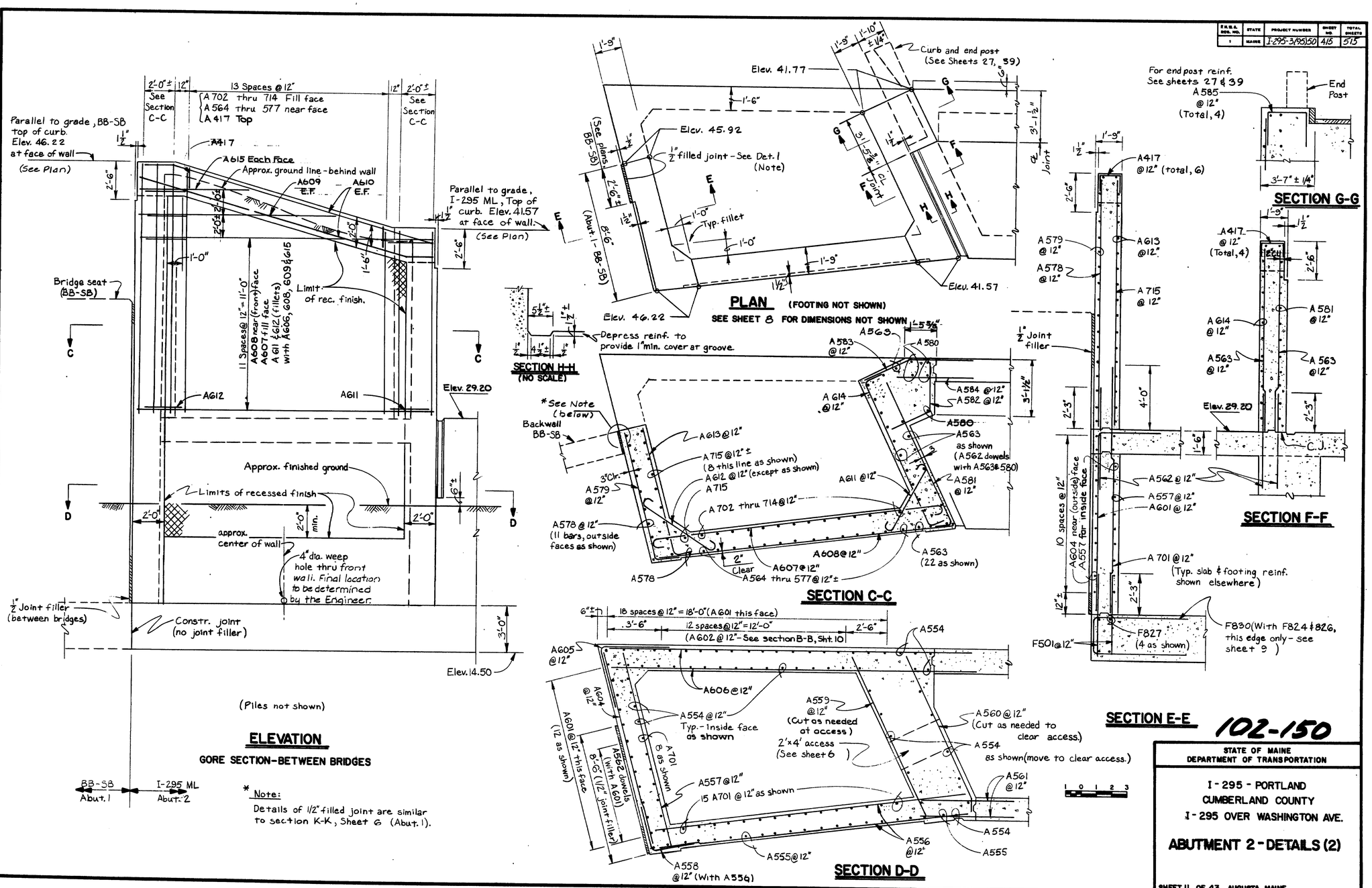
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

ABUTMENT 2 DETAILS (1)

SHEET 10 OF 43 AUGUSTA, MAINE

F.H.W.A. REGN. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	4/5	515



PROJECT	DESIGN - DETAILED	DRAWN	CHECKED	REVISIONS	FIELD CHANGES	BY	DATE
PLANS		MB					11-85

BRUNING 44-132 45710-1

102-150

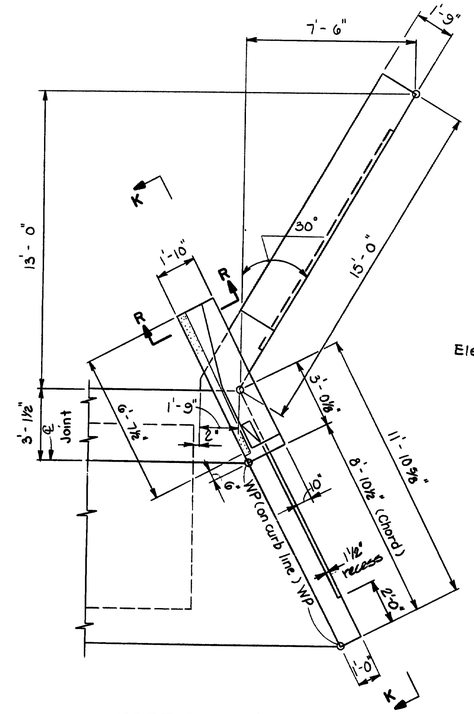
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

ABUTMENT 2 - DETAILS (2)

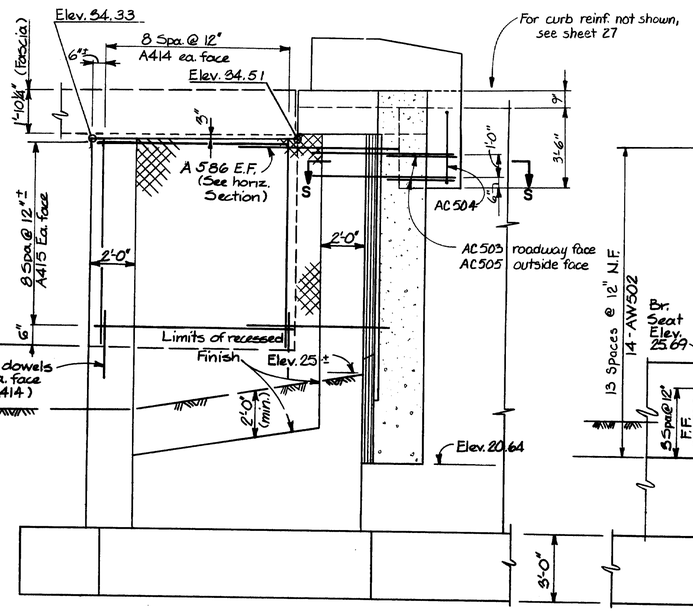
SHEET 11 OF 43 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	416	515



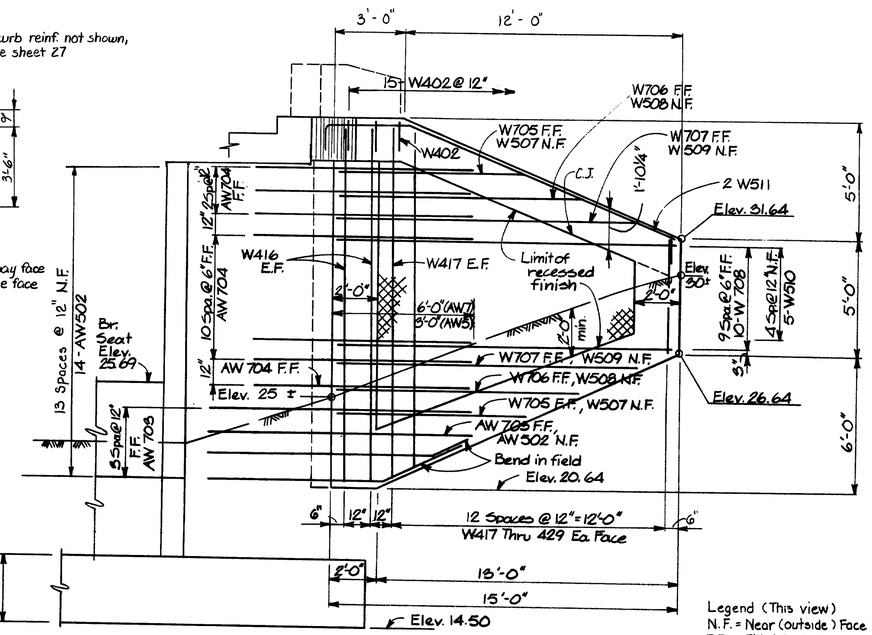
PART PLAN & LAYOUT

S.E. Corner & Wing



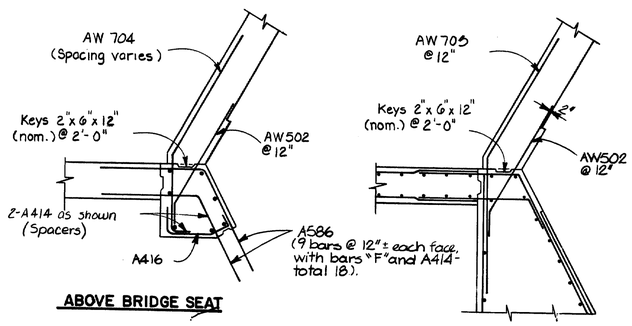
END VIEW

SECTION K-K



WING ELEVATION

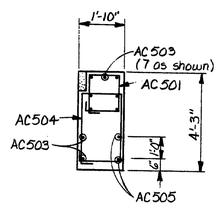
Legend (This view)
N.F. = Near (outside) Face
F.F. = Fill (Far) Face
E.F. = Each Face



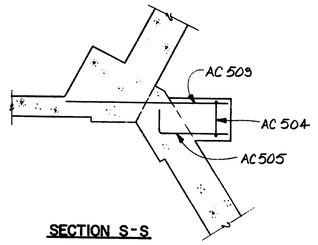
ABOVE BRIDGE SEAT

BELOW BRIDGE SEAT

HORIZONTAL SECTIONS



SECTION R-R



SECTION S-S

CURB END DETAILS

(See sheet 27)

Details shown are typical except at N.W. corner, Abutment 2

1 0 1 2 3

PROJECT DESIGN ENGINEER	BY	DATE
PLANS	DESIGN - DETAILED	TJH
	CHECKED	ESA
	REVISIONS	
	FIELD CHANGES	

BRUNING 44-132 45710-1

102-151

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

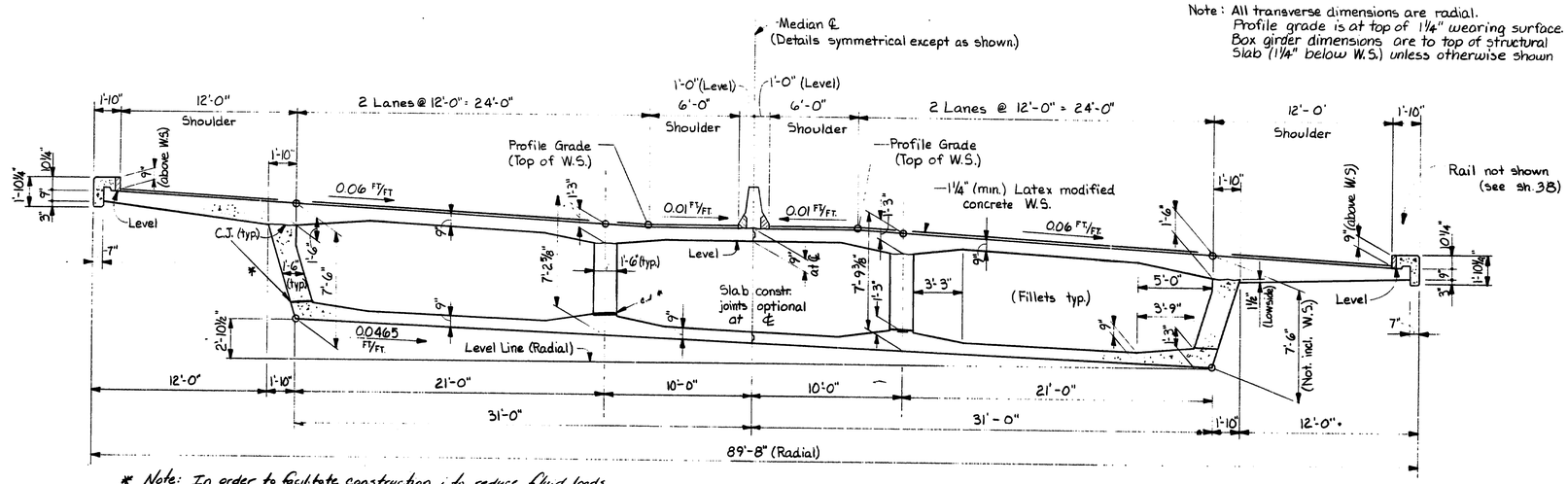
I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

ABUTMENT 2 DETAILS (3)

SHEET 12 OF 43 AUGUSTA, MAINE

F.H.W.A. ROUTE NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(99)50	417	515

Note: All transverse dimensions are radial.
Profile grade is at top of 1¼" wearing surface.
Box girder dimensions are to top of structural slab (1¼" below W.S.) unless otherwise shown

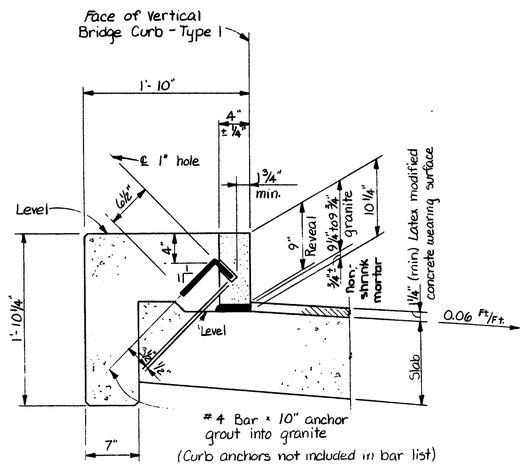


* Note: In order to facilitate construction; to reduce fluid loads, a construction joint was allowed between the bottom slab; girder walls.

TRANSVERSE SECTION

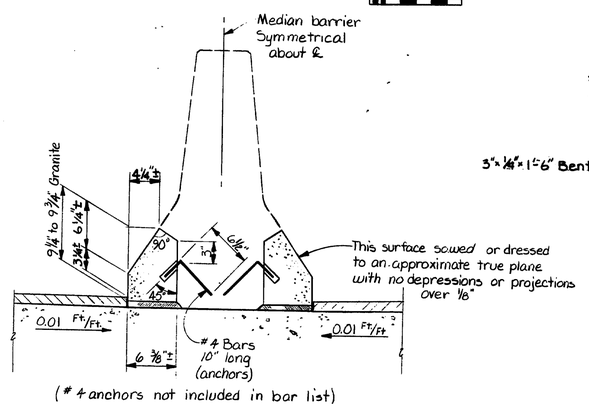
(NEAR MIDSPAN)

1 0 1 2 3 4 5



VERTICAL BRIDGE CURB - TYPE I

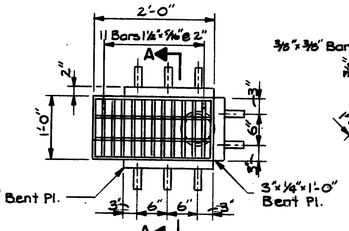
0



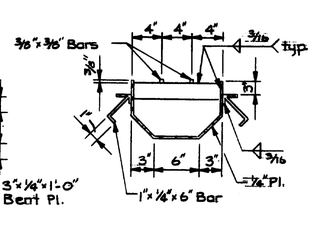
(#4 anchors not included in bar list)

VERTICAL BRIDGE CURB - SPECIAL

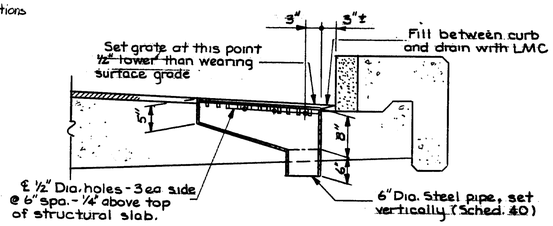
Details and dimensions not shown are as shown for Vertical Bridge Curb - Type I



PLAN



SECTION A-A



BRIDGE DRAIN

102-152
REVISED AS BUILT BY PLB 1-91

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

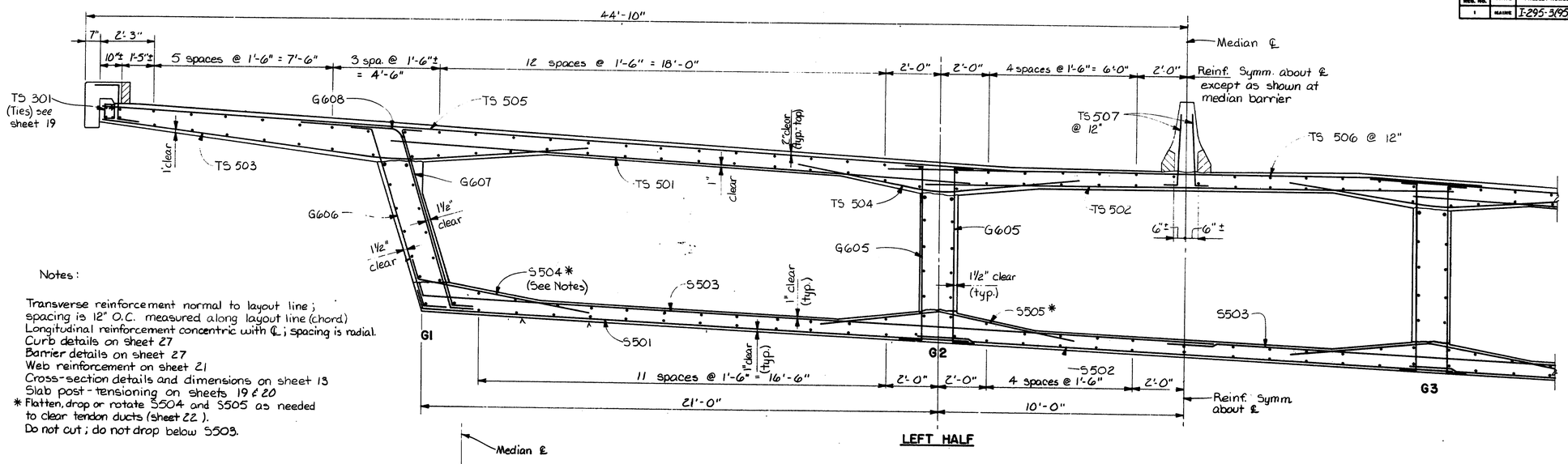
TRANSVERSE SECTION

SHEET 13 OF 43 AUGUSTA, MAINE

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	EBC	11-85
	CHECKED	AG	
	REVISIONS	BCA	
	FIELD CHANGES		

DRAWING 44-132.4(710-1

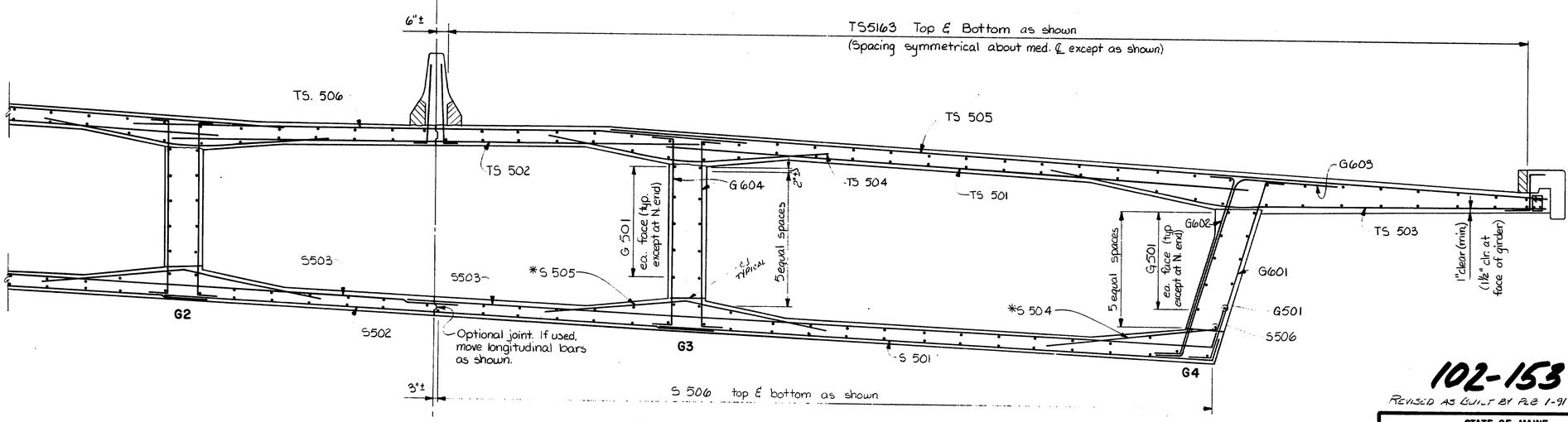
F.H.W.A. REGN. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(95)SD	4/8	515



Notes:

Transverse reinforcement normal to layout line; spacing is 12" O.C. measured along layout line (chord)
Longitudinal reinforcement concentric with ℄; spacing is radial.
Curb details on sheet 27
Barrier details on sheet 27
Web reinforcement on sheet 21
Cross-section details and dimensions on sheet 13
Slab post-tensioning on sheets 19 & 20
* Flatten, drop or rotate S504 and S505 as needed to clear tendon ducts (sheet 22).
Do not cut; do not drop below S503.

LEFT HALF



RIGHT HALF

CROSS SECTION NEAR MIDSPAN

(Slab reinforcement shown is typical except near ends - see plan views)

1 0 1 2

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	EBC	AG 1-95
	CHECKED	ESA	
	REVISIONS		
	FIELD CHANGES		

DRAWING 44-132.457101

102-153

REVISED AS BUILT BY P.E. 1-91

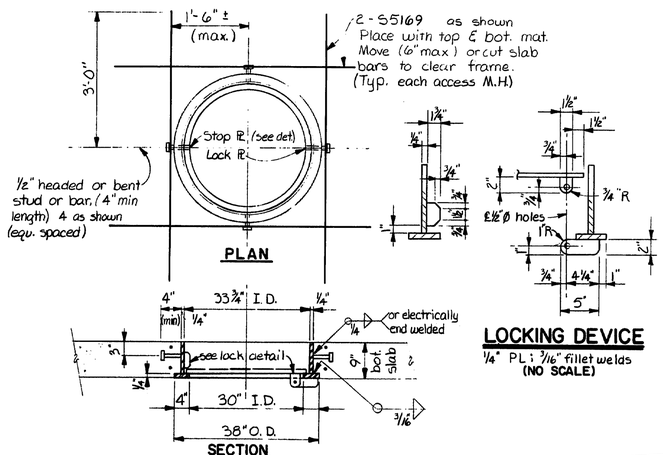
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

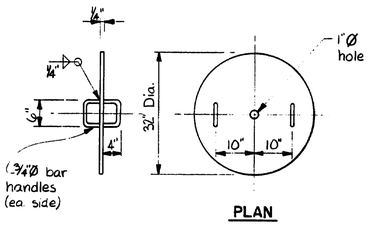
CROSS-SECTION REINFORCEMENT

SHEET 14 OF 43 AUGUSTA, MAINE

F.A.H.S. PROJ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	419	515



LOCKING DEVICE
¼" PL; 3/16" fillet welds
(NO SCALE)

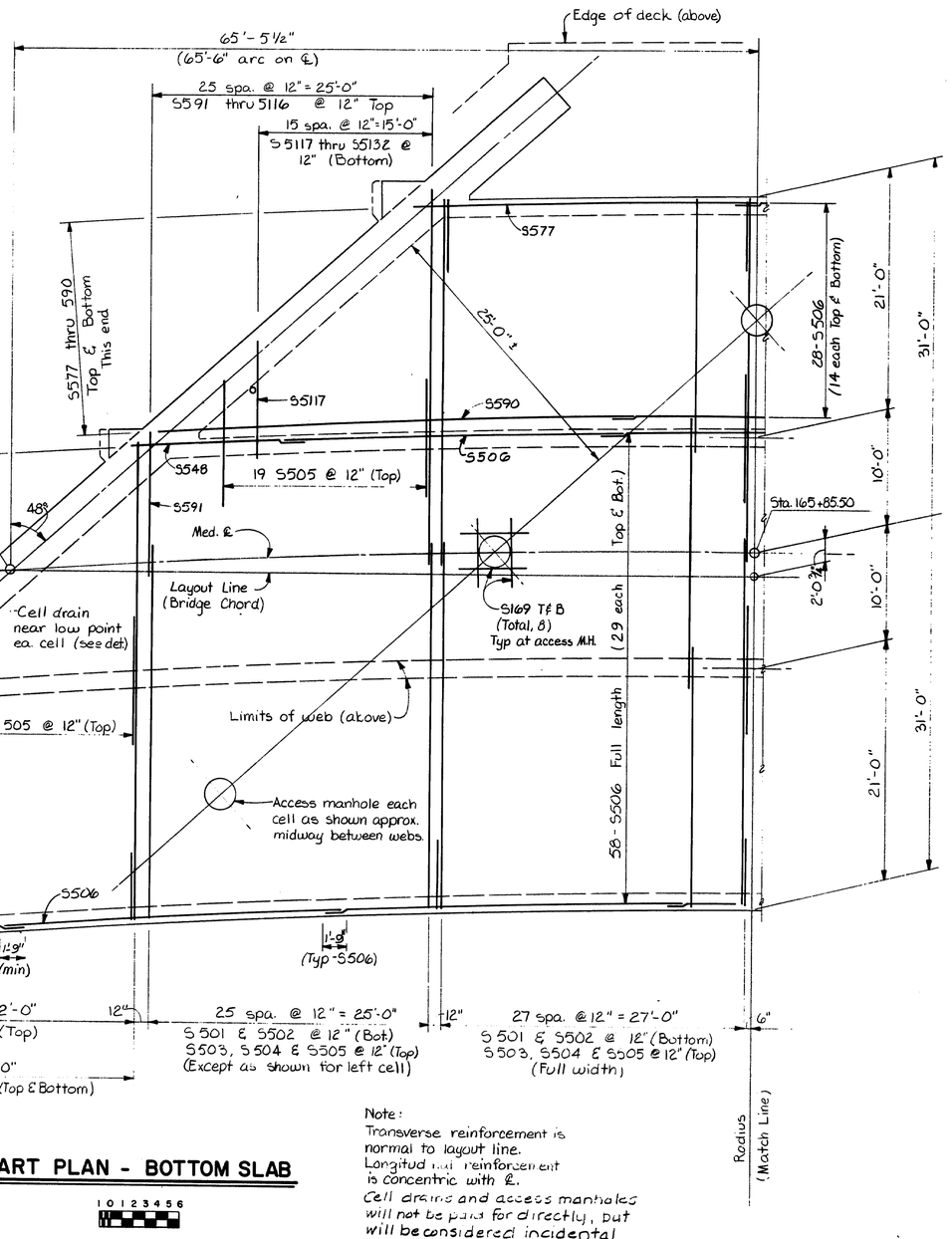


PLAN
LID DETAILS
ACCESS MANHOLE

3 required - ¼" plate A-36, Galvanize after fabrication

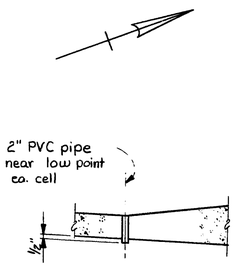
Weight of assembly: 175 lbs. each. (approx.)

Note: Manhole lid must be inside box girder before deck is completed - can not be installed thru manhole.



PART PLAN - BOTTOM SLAB

Note:
Transverse reinforcement is normal to layout line.
Longitudinal reinforcement is concentric with ℄.
Cell drains and access manholes will not be paid for directly, but will be considered incidental to item 535.72.



CELL DRAIN - BOTTOM SLAB
3 REQUIRED
No Scale

PROJECT DESIGN TRAINEE	BY	DATE
PLANS	DESIGNED DETAILED CHECKED REVISIONS FIELD CHANGES	AG 1/1/85

BRUNING 44-132 42710-1

102-154

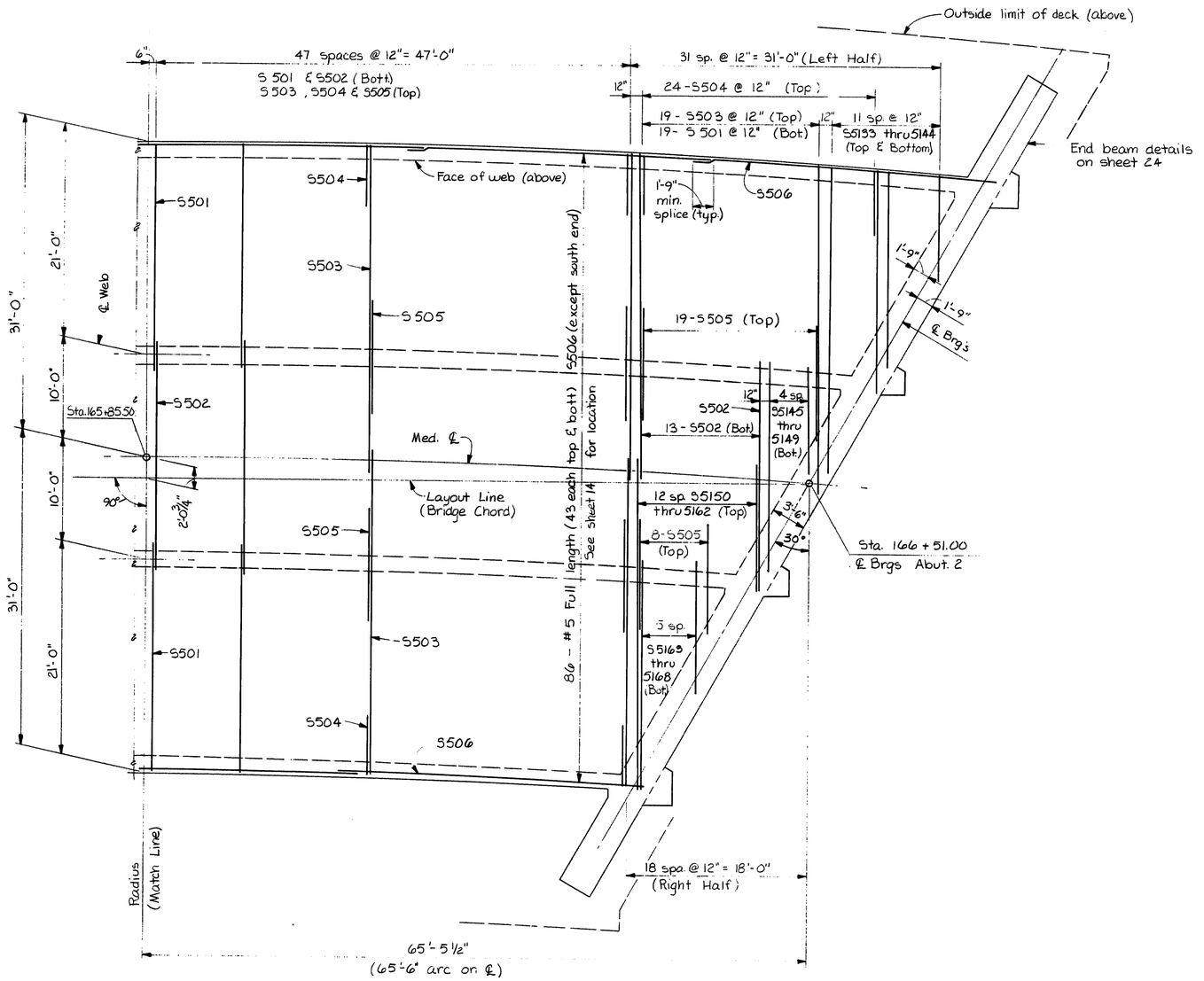
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

BOTTOM SLAB-1

SHEET 15 OF 43 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	420	515



PART PLAN - BOTTOM SLAB

1 0 1 2 3 4 5 6

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	EBC ASM	AG. 11-85
	CHECKED		
	REVISIONS		
	FIELD CHANGES		

PRINTING 44-132-49710-1

102-155

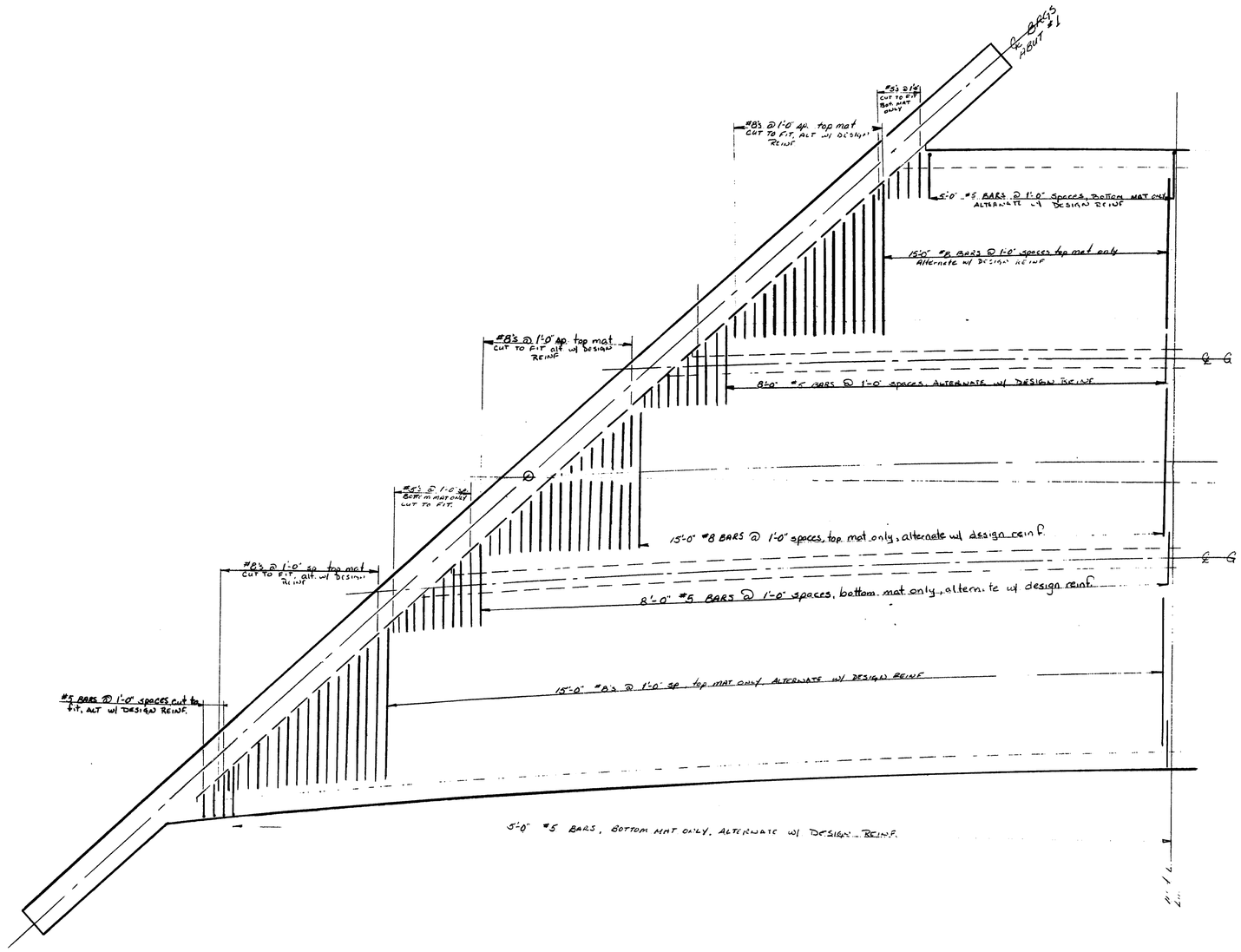
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I - 295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

BOTTOM SLAB-2

SHEET 16 OF 43 AUGUSTA, MAINE

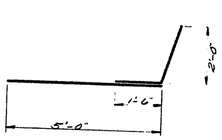
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE			



NOTE

Due to contractor's falsework design (ie. mudslab) additional reinforcing was required for short-term dead loads. It was felt by designers that point loads from girder walls, and ultimately top slab through girder walls, would cause undue deflection to the unreinforced concrete form. This could result in damage to the structure, therefore additional reinforcing was added as shown in detail @ left. DESIGN REINF. was not altered.

PLB 2/91



DETAIL OF BARS FOR EXTERIOR GIRDERS.

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	AB	2/91
	CHECKED		
	REVISIONS		
	FIELD CHANGES		

BRUNING 45710-1

102-156

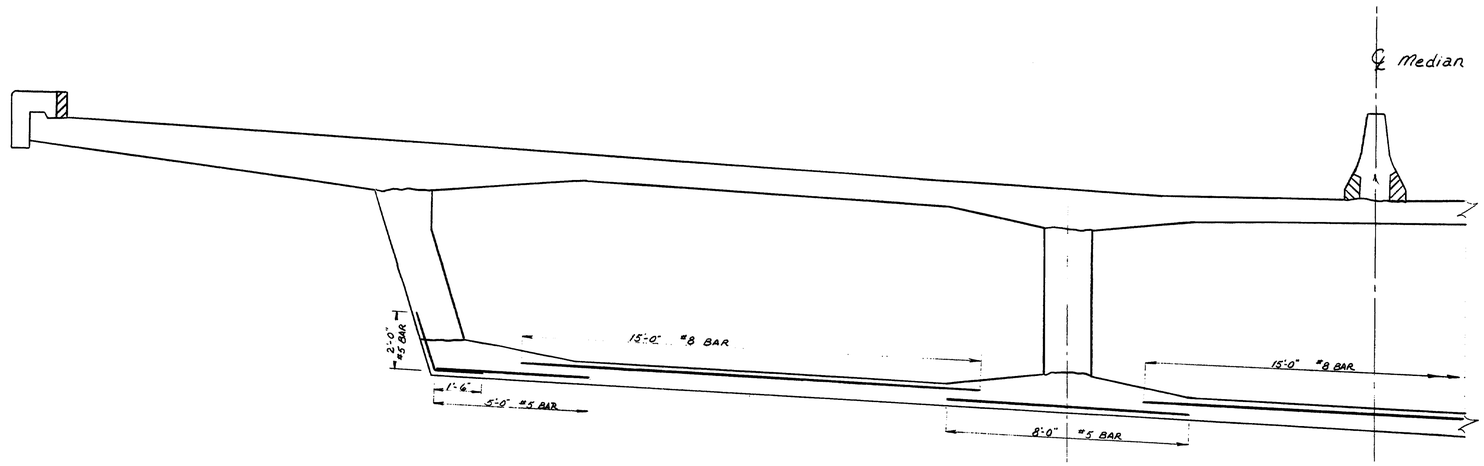
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

PLAN-VIEW OF ADDITIONAL REINFORCEMENT

SHEET 16 OF 43 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE			



Extra reinforcing steel shown above is symmetrical about ℄. Alternated with design reinforcing.

This change was required as a result of Contractor's method of falsework, no extra payment made for additional steel.

Work this section with plan view on preceeding sheet.

Revised as built by PLB 2/91

PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	PLB	2/91
CHECKED		
REVISIONS		
FIELD CHANGES		

BRUNING 4710-1

102-157

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

CROSS-SECTION OF ADDITIONAL REINFORCEMENT

SHEET 16 OF 43 AUGUSTA, MAINE

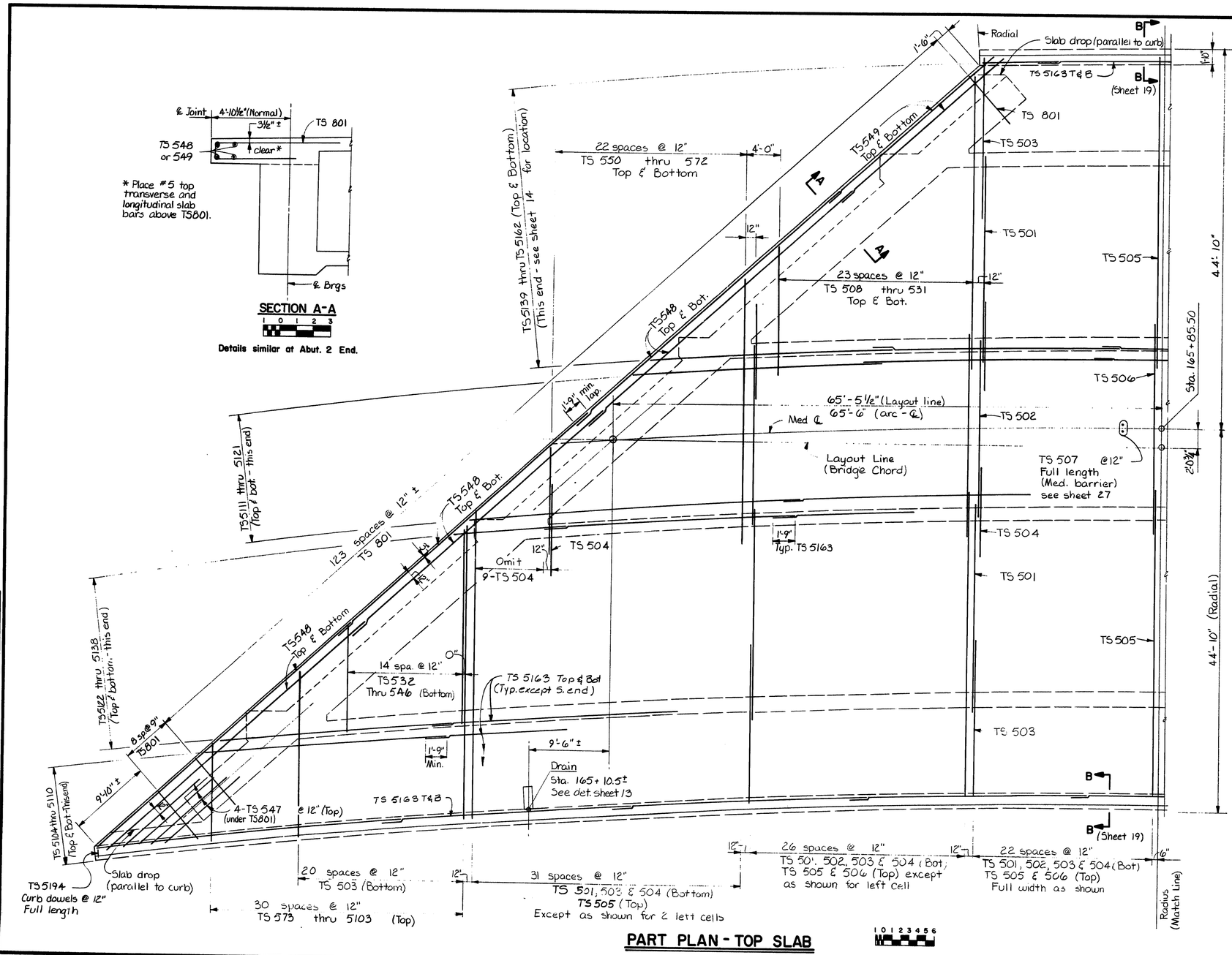
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	421	515

* Place #5 top transverse and longitudinal slab bars above TS801.

SECTION A-A

I 0 I 2 3

Details similar at Abut. 2 End.



PART PLAN - TOP SLAB

1 0 1 2 3 4 5 6

Note
For slab edge and curb reinforcement: see sheets 19 and 27.

PROJECT ORIGIN ENGINEER	BY	DATE
PLANS	DESIGN - DETAILED	EBC AG	11-85
	CHECKED	EBC	2-87
	REVISIONS		
	FIELD CHANGES		

BRUNING 44-132 457101

102-158

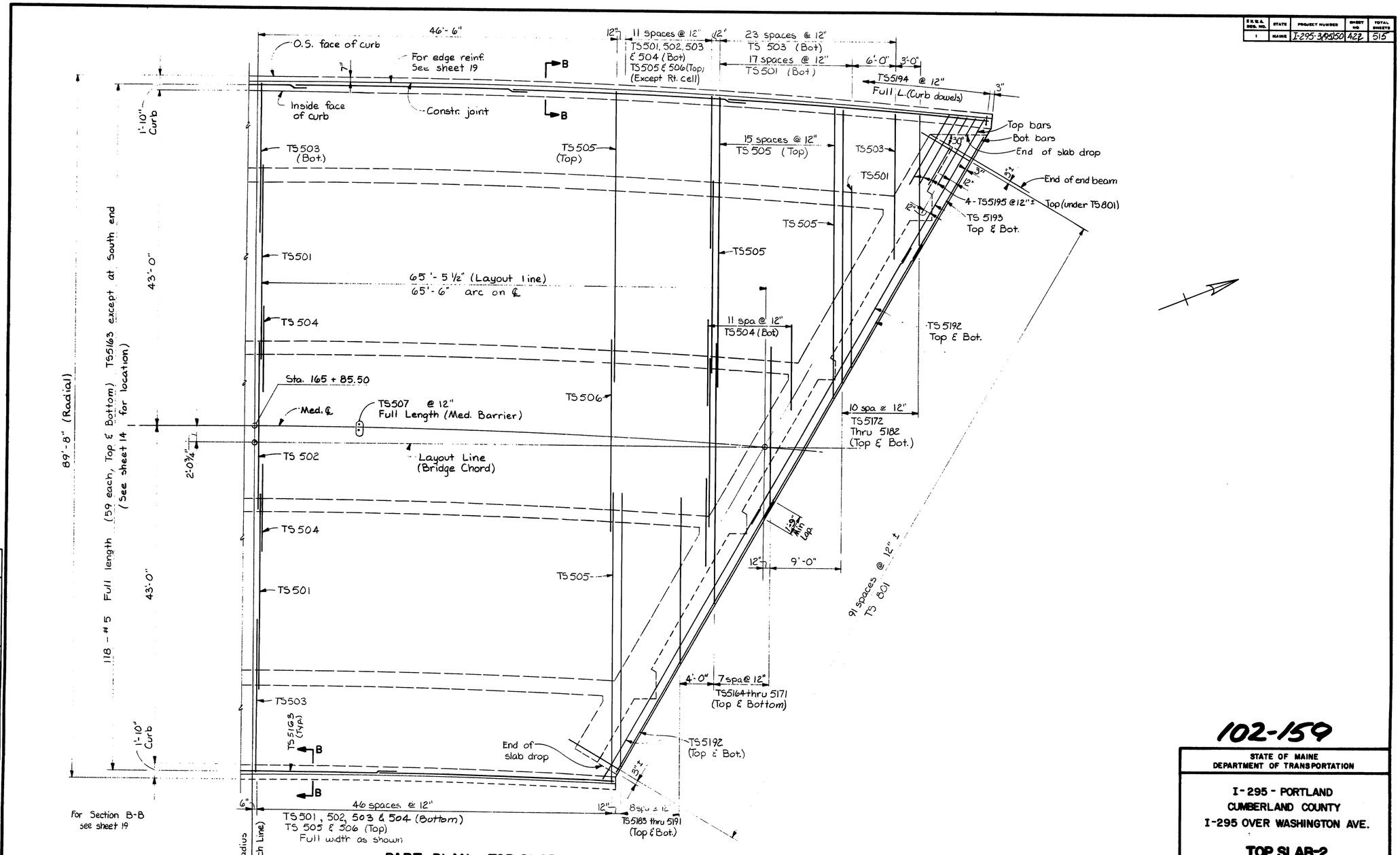
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

TOP SLAB-1

SHEET 17 OF 43 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(55)50	428	515



PART PLAN - TOP SLAB

0 1 2 3 4 5 6

PROJECT MEDIAN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	EBC	11-85
CHECKED	A.B.	
REVISIONS	B.G.	
FIELD CHANGES		

DRAWING 44-132-427101

102-159

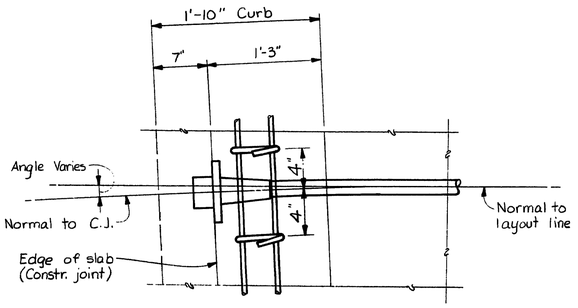
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

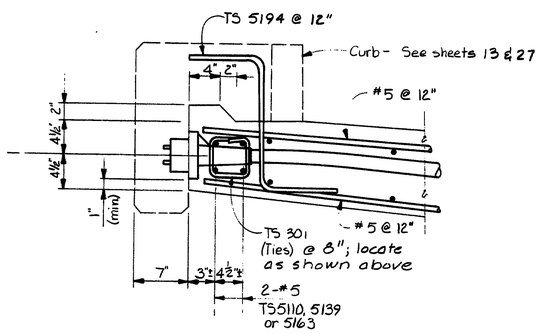
TOP SLAB-2

SHEET 18 OF 43 AUGUSTA, MAINE

F.A.R.S. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(95)50	423	515



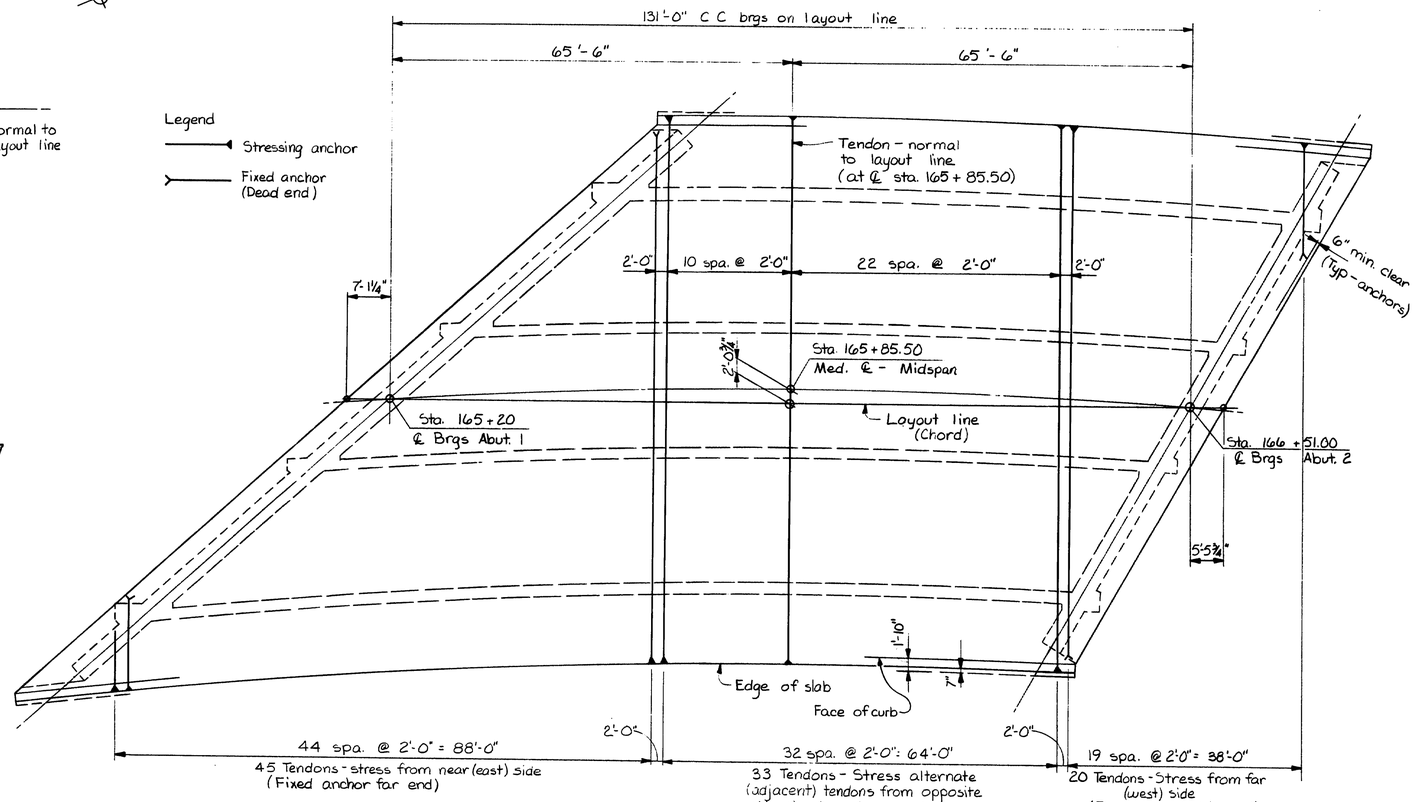
PLAN
(Typ slab reinf. not shown)



SECTION B-B
(Sheets 17 and 18)

STRESSING ANCHOR DETAILS

Legend
- Stressing anchor
- Fixed anchor (Dead end)



TOP SLAB TRANSVERSE TENDON LAYOUT

Notes:

Layout and details shown are based on tendons consisting of four 0.6" dia., 270ᴷ strand in 2" (ϕ) dia. galvanized, rigid conduit, tensioned to 0.75 f's and anchored at 1/4" anchor set.
Assumptions:
Pj (Jacking force) = 0.75 f's = 176 kips per 4-strand tendon.
K = 0.0002 ; μ = 0.25
Long-term losses = 33,000 psi
Anchor set = 0.25 inch
Tendons are normal to Layout Line, spaced at 2'-0" C.C.
See sheet 20 for tendon profiles and fixed-end anchors.

PROJECT ENGINEER	BY	DATE
DESIGN - DETAILED	JBC	11/95
CHECKED	ACA	
REVISIONS		
FIELD CHANGES		

PLANS

DRAWING 44-132.45710.1

102-160

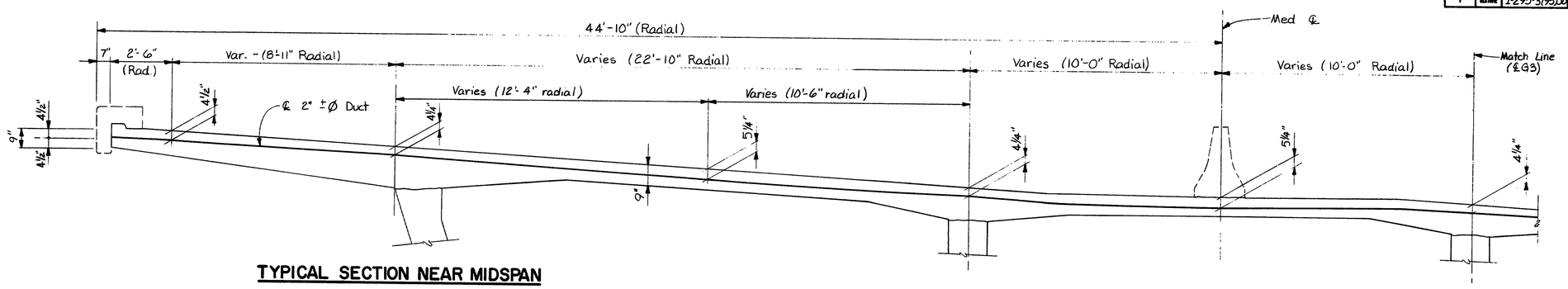
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

**TOP SLAB-
TENDON LAYOUT**

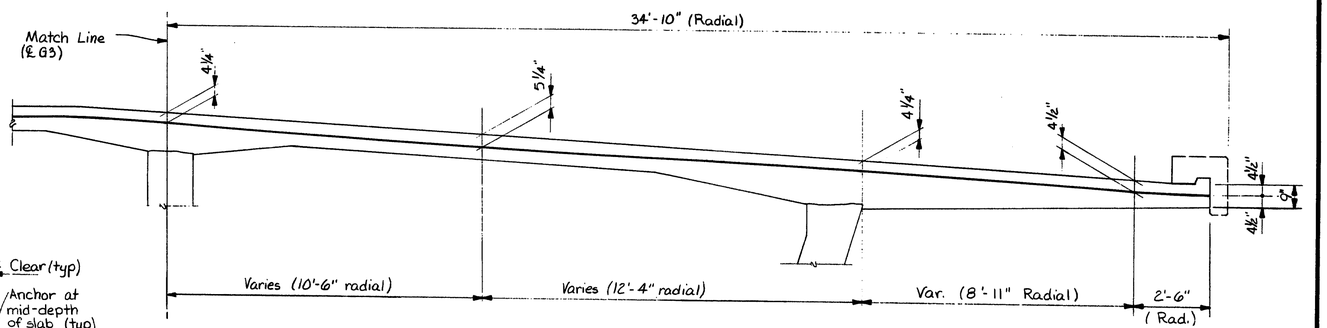
SHEET 19 OF 43 AUGUSTA, MAINE

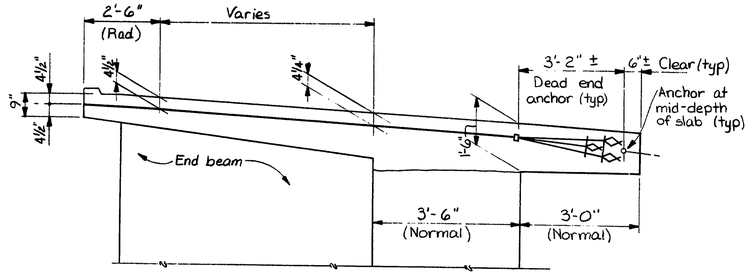
F.A.U. & SEQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)58	424	515



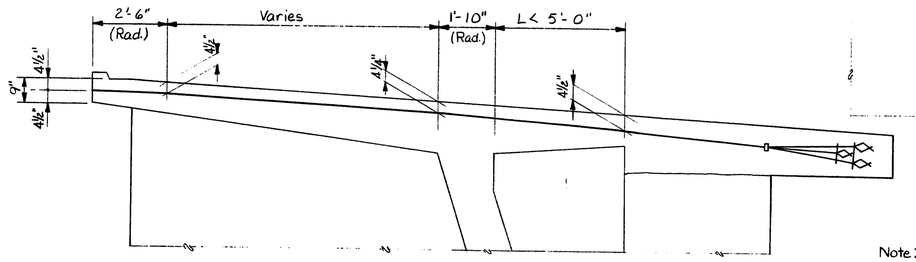
TYPICAL SECTION NEAR MIDSPAN

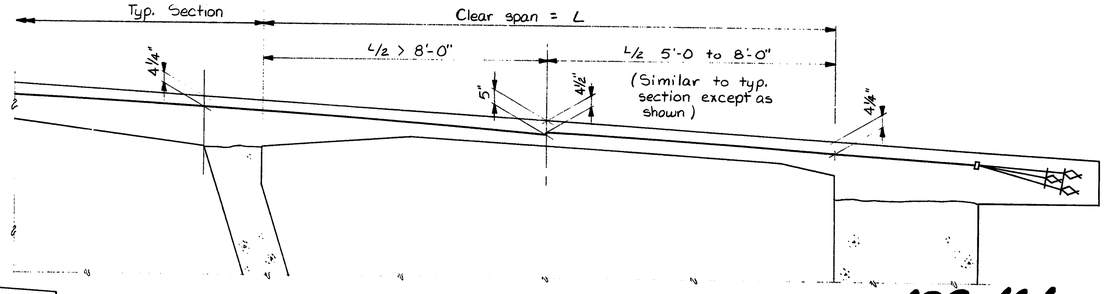
Note:
Transverse tendons are normal to Layout Line.
Ordinates shown are based on 4-0.6" Ø 270ᴷ strands in 2.00" O.D. duct (Actual dia.= 2.12")
Spacing of tendons is 2'-0" O.C., measured along Layout Line
For Layout, details and stressing notes, see sheet 19.
Place ducts on smooth curves between control points shown.
Dimensions are to surfaces of structural slab (LMC wearing surface not shown).





Details typical for all part-sections (Except tendon profile)





TYPICAL SECTIONS NEAR ACUTE CORNERS

(Abutment 2 Shown)

Note:
Exterior cell shown; tendon ordinates typical for all cells.
Dead-end anchor shown is based on VSL fixed-end anchorage for 4-0.6" strands in 2.12" O.D. duct. Other systems and details may be proposed for the Engineer's consideration.
Grout vents required at fixed-end anchors.

PROJECT ENGINEER	BY	DATE
DESIGN - DETAILED	CBC	11-85
CHECKED	AG	
REVISIONS	CBC	
FIELD CHANGES		

PLANS

BRUNING 44-132 457101

102-161

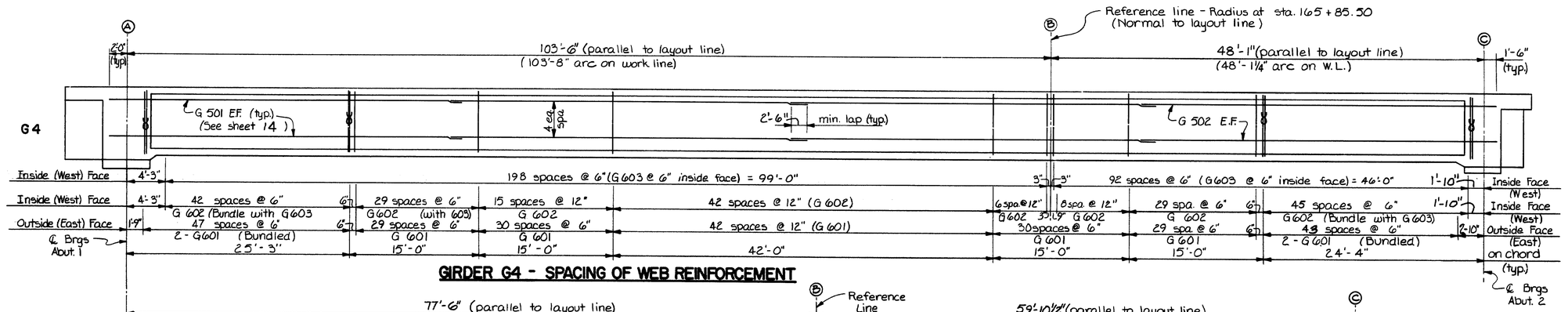
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

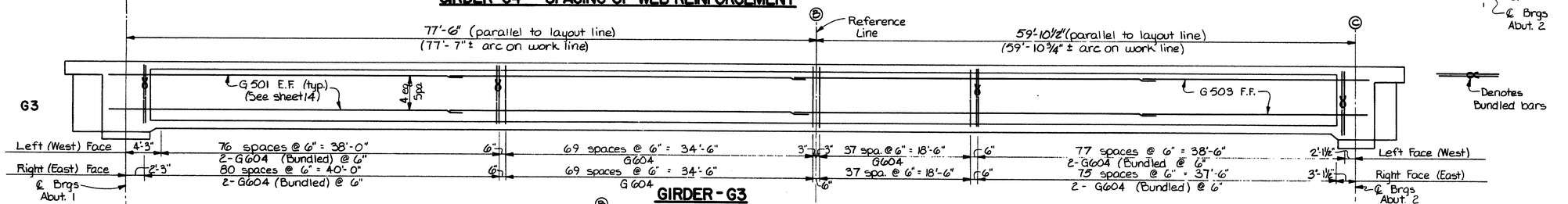
SLAB TENDONS

SHEET 20 OF 43 AUGUSTA, MAINE

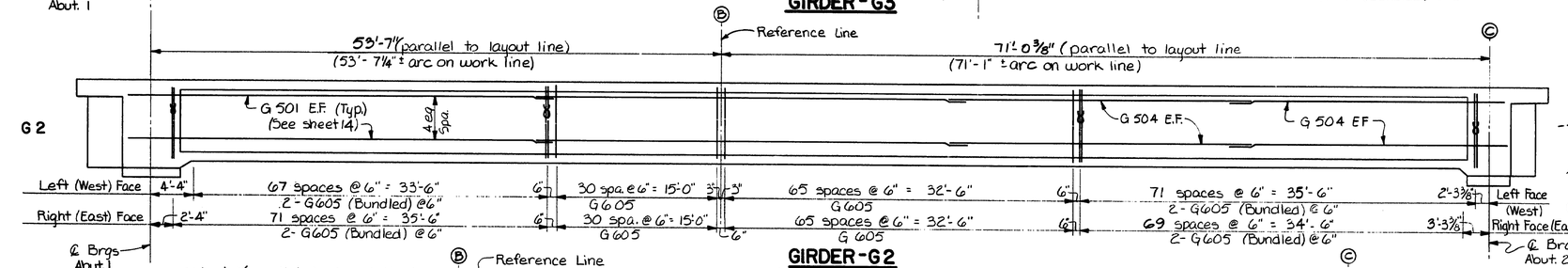
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(95)50	425	515



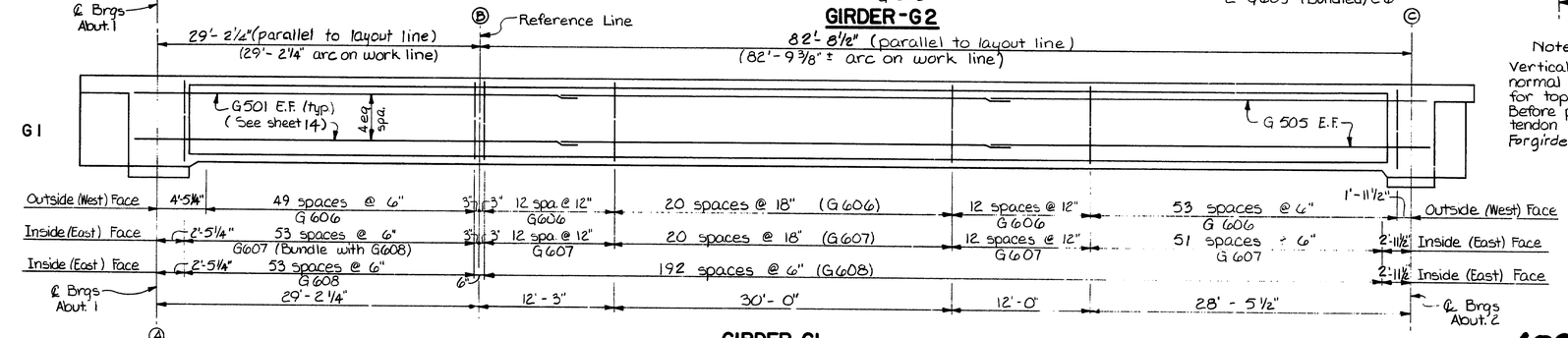
GIRDER G4 - SPACING OF WEB REINFORCEMENT



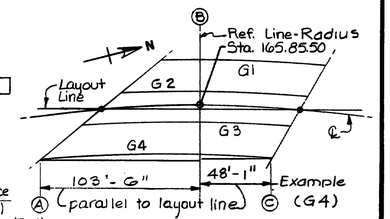
GIRDER - G3



GIRDER - G2



GIRDER GI



ORIENTATION DIAGRAM
NO SCALE

Note:
Vertical web reinforcement is spaced on and oriented normal to layout line in order to provide clear path for top slab tendons (same as slab reinforcement). Before placing concrete, check for straight tendon path. See sheets 17, 18 & 19. For girder work lines, see Sheet 22

1 0 1 2 3 4 5 6

PROJECT DESIGN REVIEWER	DATE
PLANS — DESIGN - DETAILED	BY
CHECKED	
REVISIONS	
FIELD CHANGES	

BRUNING 44-132 457101

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

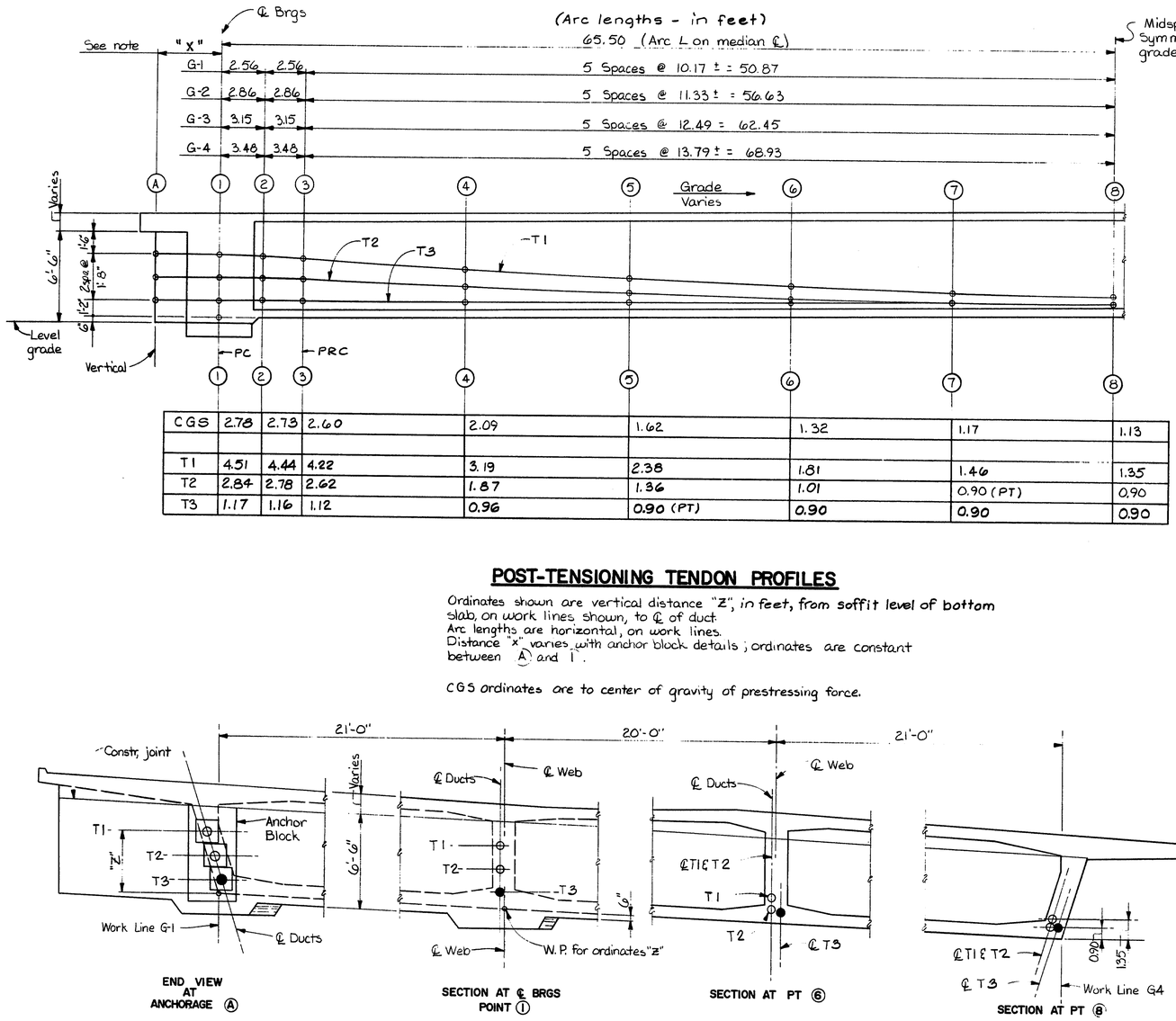
I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

GIRDER WEB REINFORCEMENT

SHEET 21 OF 43 AUGUSTA, MAINE

102-162

R.R.& BRS. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	426	515



	1	2	3	4	5	6	7	8
CGS	2.78	2.73	2.60	2.09	1.62	1.32	1.17	1.13
T1	4.51	4.44	4.22	3.19	2.38	1.81	1.46	1.35
T2	2.84	2.78	2.62	1.87	1.36	1.01	0.90 (PT)	0.90
T3	1.17	1.16	1.12	0.96	0.90 (PT)	0.90	0.90	0.90

POST-TENSIONING TENDON PROFILES

Ordinates shown are vertical distance "Z", in feet, from soffit level of bottom slab, on work lines shown, to ℄ of duct.
Arc lengths are horizontal, on work lines.
Distance "x" varies with anchor block details; ordinates are constant between (A) and 1.

CGS ordinates are to center of gravity of prestressing force.

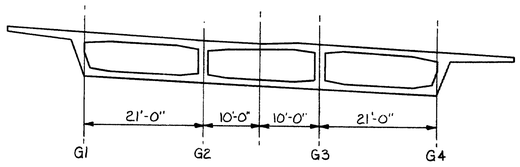
END VIEW AT ANCHORAGE (A)

SECTION AT ℄ BRGS POINT (1)

SECTION AT PT (6)

SECTION AT PT (8)

TYPICAL SECTION (RADIAL)



RADIAL OFFSETS TO GIRDER WORK LINES

No Scale

PRESTRESSING NOTES:

CONCRETE: f'ci = 4500 psi at time of prestressing.

PRESTRESSING STEEL: 270 K, 7-wire, stress-relieved strand in galvanized rigid ducts.

DESIGN ASSUMPTIONS: μ = 0.25 (horizontal & vertical curvature)
K = 0.0002
Loss of prestress due to elastic shortening, shrinkage, and creep of concrete and steel is estimated at 27,000 psi in accordance with AASHTO 9.16.2.1.

CONSTRUCTION: Ducts shall be tied to vertical reinforcement on outside of curve (west side of girder webs), except that tendon T3 shall be moved laterally one duct diameter in a smooth curved path between points (1) and (5).

Tendons shall be tensioned in cycles of one tendon per web, beginning with the 2 center webs, in the order T1, T2 and T3.

Tendons may be tensioned from either end (one end stressing), for anchor set not exceeding 1/4" ± 1/8". Anchor set exceeding this value may require redesign.

Details shown are based on 3 tendons in each web, consisting of 31 - 0.6" dia. strands in 5 1/2" O.D. ducts, tensioned to 0.75 f's and anchored at 1/4" anchor set.

P (jack) = 1362 kips per tendon.

Any equivalent system meeting the specifications and producing substantially equal stresses may be used subject to the Engineer's approval of all computations and details.

PROJECT BRIDGE ENGINEER	BY	DATE
PLANS DESIGN - DETAILED	EEG	11-85
CHECKED	LAS	
REVISIONS		
FIELD CHANGES		

BRUNING 44-132 45710-1

102-163

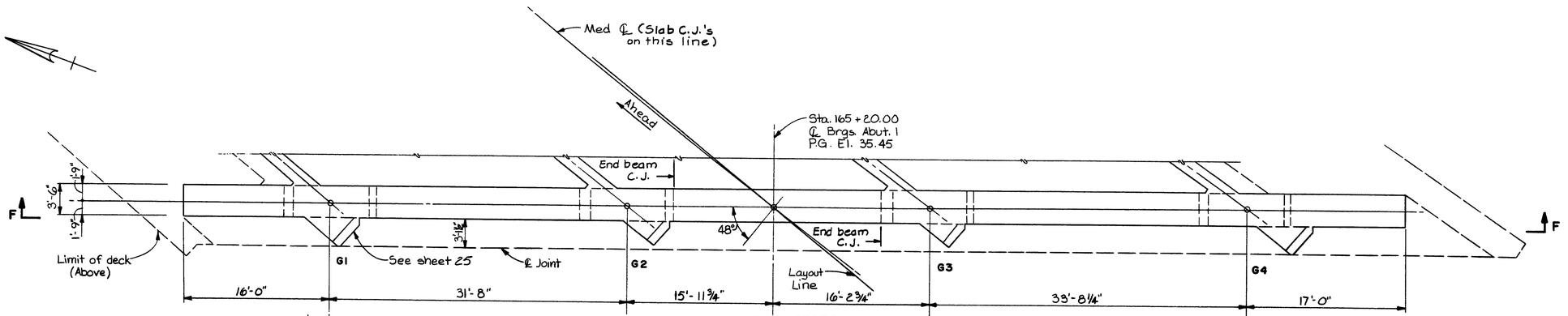
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

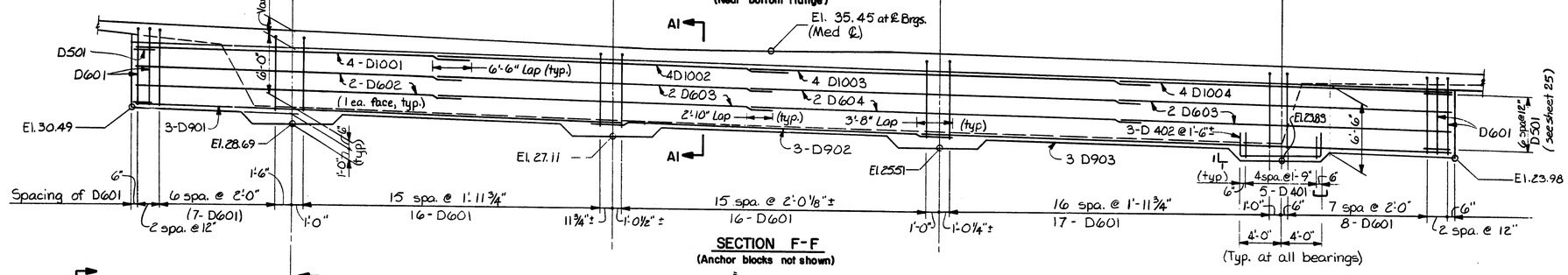
GIRDER PRESTRESSING

SHEET 22 OF 43 AUGUSTA, MAINE

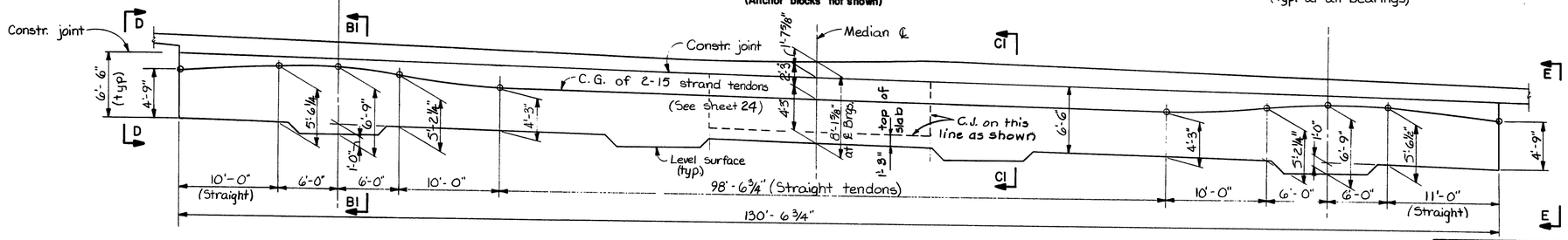
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(95)50	427	515



HORIZONTAL SECTION
(Near bottom flange)



SECTION F-F
(Anchor blocks not shown)



TENDON PROFILE

2 Tendons, each 15-0.6" dia. 270 k strands in 3¾" ± O.D. ducts
Tension to 0.75 f's (Pjack = 659 k) from North end only (Lt. side of bridge).
Tension top tendon first.

Except as noted for straight segments, tendons are on parabolic curves between points shown.
See sheet 25 for anchorage details.
Dimensions and elevations are on ℄ Bearings.

0 1 2 3 4 5 6

E 102-164

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

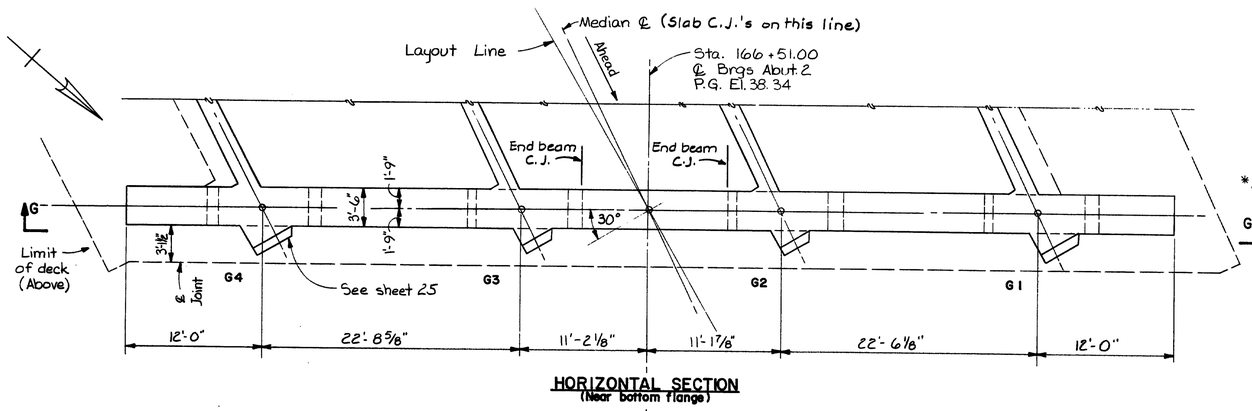
END BEAM-ABUTMENT-1

SHEET 23 OF 43 AUGUSTA, MAINE

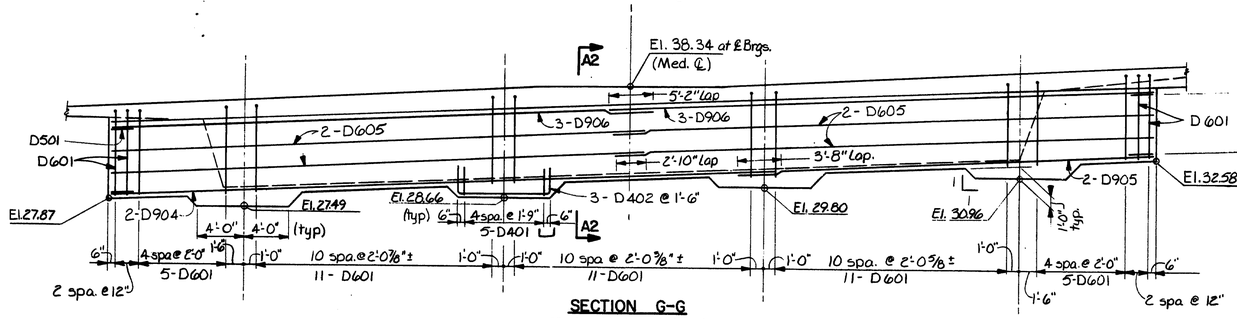
PROJECT DESIGN ENGINEER
PLANS
DESIGN - DETAILED BY KBC
CHECKED ASA
REVISIONS DATE
FIELD CHANGES 11-85

DRAWING 44-152.407(0)-1

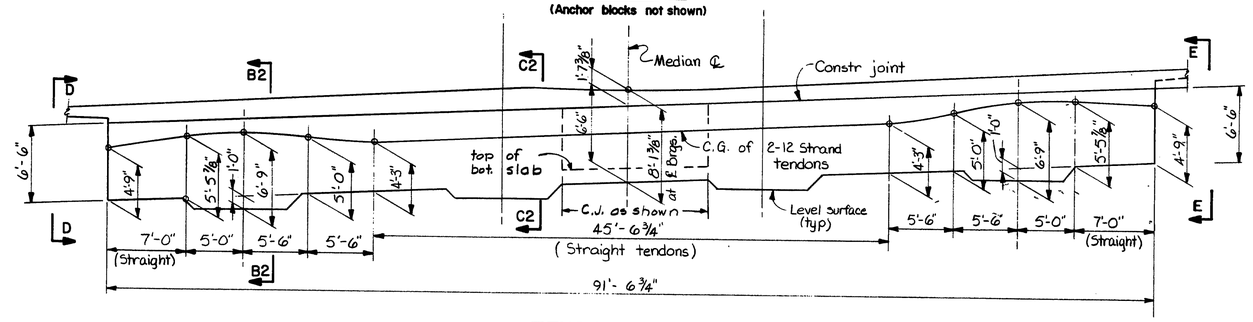
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3955(50)	428	515



HORIZONTAL SECTION
(Near bottom flange)



SECTION G-G
(Anchor blocks not shown)

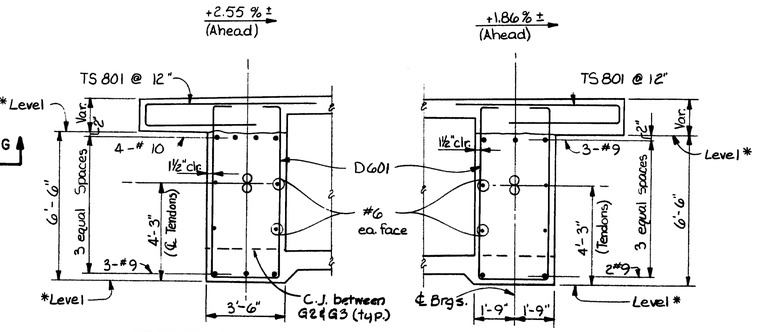


TENDON PROFILE

2 Tendons, each 12-0.6" dia. 270 k strands in 3" ± O.D. ducts
Tension to 0.75 f's (P jack = 527 k) from South end only (Rt side of bridge)
Tension top tendon first

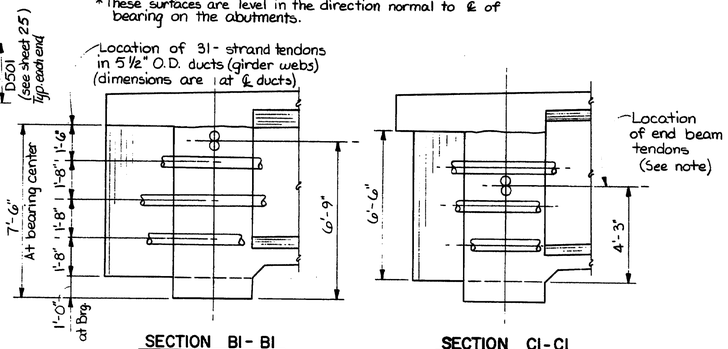
Except as noted for straight segments, tendons are on parabolic curves between points shown.

Dimensions and elevations are on ℄ Bearings



SECTION A1 - A1
SECTION A2 - A2
(Dimensions and reinforcement typical except as shown)

*These surfaces are level in the direction normal to ℄ of bearing on the abutments.



SECTION B1 - B1
(B2 Similar except grade)

SECTION C1 - C1
(C2 Similar except grade)

(Dimensions and reinforcement typical except as shown)

Tendons in end beams:

About 1 2-15 strand tendons in 3¾" ± O.D. ducts

About 2 2-12 strand tendons in 3" ± O.D. ducts

For end views D-D and E-E and anchorage details, see sheet 25

For deck joint details (not shown) see sheets 28 & 29

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	GBC	AS	11-85
	CHECKED	RCA		
	REVISIONS			
	FIELD CHANGES			

DRAWING 44-132 4710-1

102-165

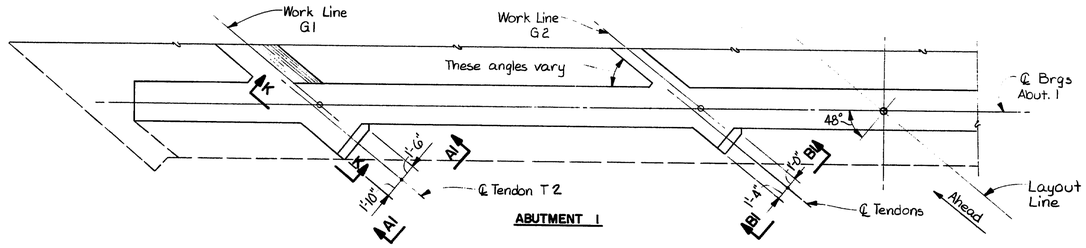
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

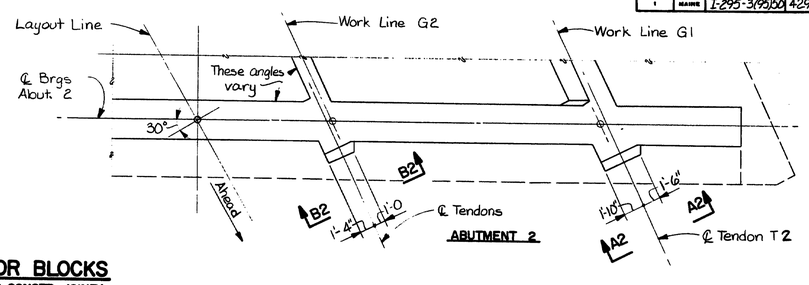
END BEAM-ABUTMENT-2

SHEET 24 OF 43 AUGUSTA, MAINE

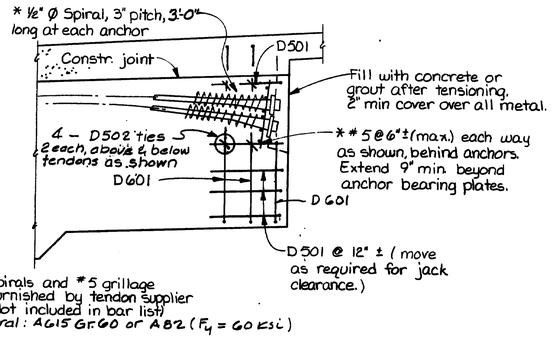
F.H.W.A. REGN. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(955)50	429	516



ABUTMENT 1



ABUTMENT 2

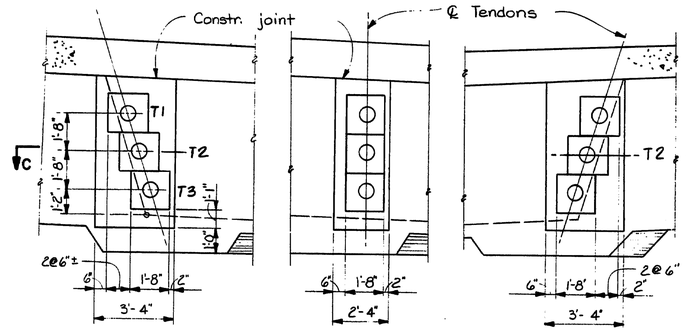


* Spirals and #5 grillage furnished by tendon supplier (Not included in bar list)
Spiral: A615 Gr. 60 or A82 (F_y = 60 ksi.)

PART SECTION G-G
AT TENDON ANCHORAGE (F-F SIMILAR)
(Sheets 23 & 24)

PART PLAN ANCHOR BLOCKS
(HORIZONTAL SECTION AT SLAB CONSTR. JOINT)
MAIN GIRDER TENDON ANCHORS

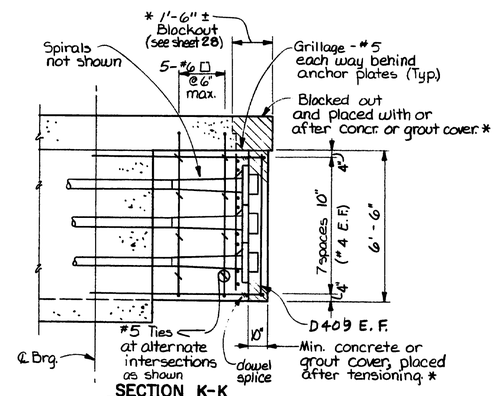
1 0 1 2 3 4 5 6



A1 - A1 B1 - B1 A2 - A2

(B2 Similar except cross-slope)

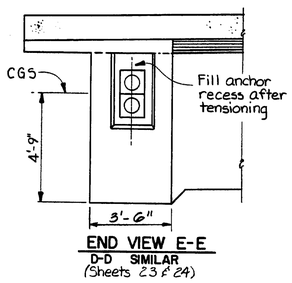
1 0 1 2 3



SECTION K-K
GIRDER G1 AT ABUT. 1 SHOWN

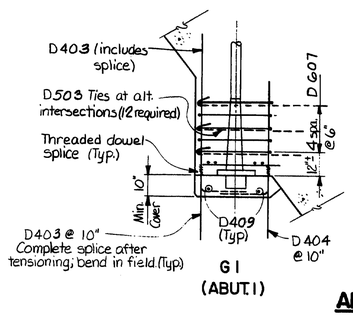
Note: Details typical where applicable. See horizontal section (C-C) for variations at other anchor blocks (Bar designations shown on C-C)

* Cover over anchorages may be placed with concrete in 1'-6" ± top slab blockout at expansion joints. See sheet 28.

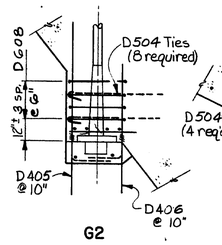


END VIEW E-E
D-D SIMILAR
(Sheets 23 & 24)

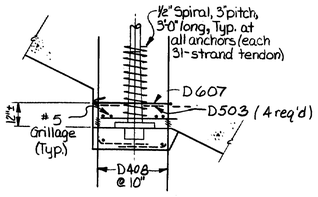
Note: Anchorage details shown are typical for 12 and 15 strand tendons in end beams. Exact details and dimensions will depend on system used.



G1 (ABUT. 1)



G2 G2



G1 (ABUT. 2)

ANCHOR BLOCK REINFORCEMENT (SECTION C-C)
G1 AND G2 SHOWN; G3 & G4 SIMILAR

Note:
Spirals and grid of #5 ea. way behind anchor plates to be furnished by prestress supplier; not included in bar list. Details shown are based on 31-strand tendons in 5½" O.D. Ducts; 20" square x 3" brg. plates. Other systems may require different details.
Spirals shall meet the requirements of ASTM A615, Gr. 60, or A 82 (F_y = 60 ksi. min.).

END BEAM TENDON ANCHORS

PROJECT DESIGN REMINDER	BY	DATE
PLANS	DESIGN - DETAILED	JAS
	CHECKED	LAG
	REVISIONS	1/85
	FIELD CHANGES	

BRUNING 44-132 48710-1

102-166

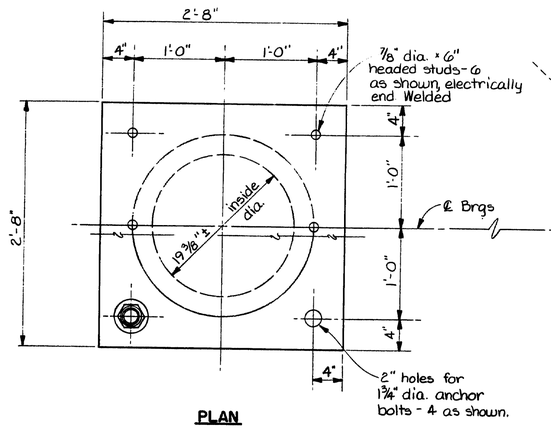
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

TENDON ANCHORS

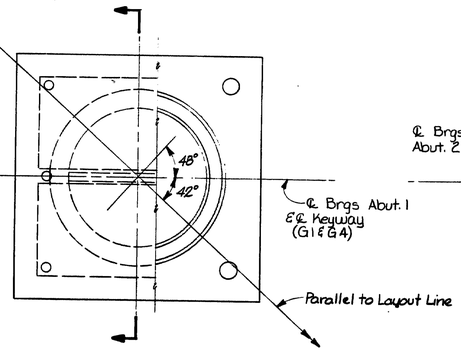
SHEET 25 OF 43 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	430	515



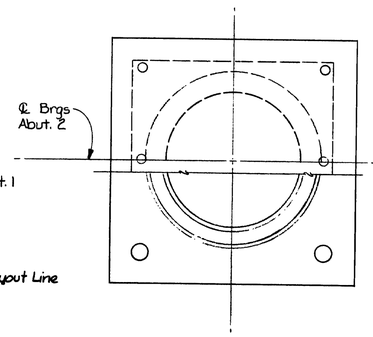
PLAN

ABUTMENT 1 - G2 & G3



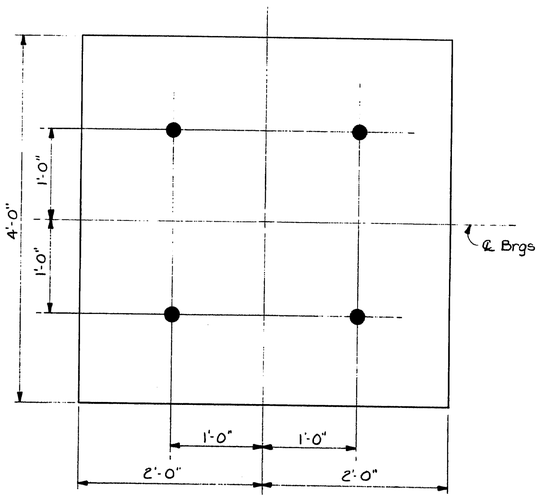
PLAN

ABUTMENT 1 - G1 & G4

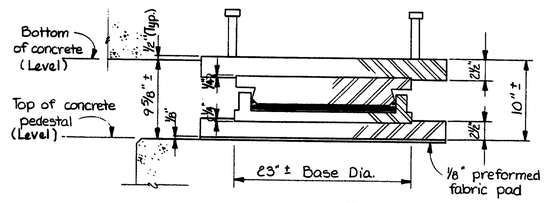


PLAN

ABUTMENT 2 - G1 & G4



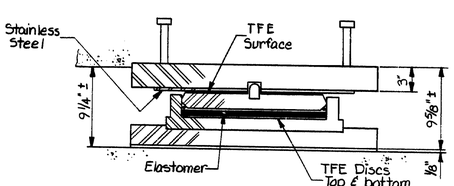
PEDESTAL PLAN & ANCHOR BOLT LAYOUT



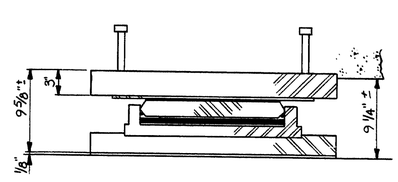
SECTION

FIXED BEARING

Dimensions and details typical for all bearings except as shown or noted.



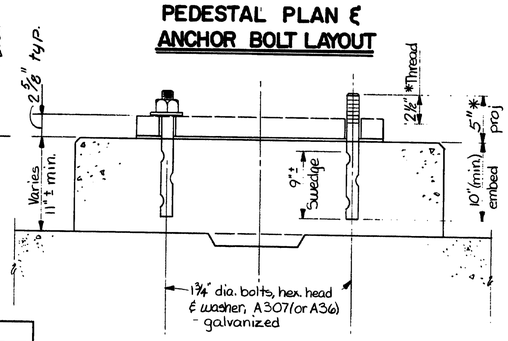
SECTION



SECTION

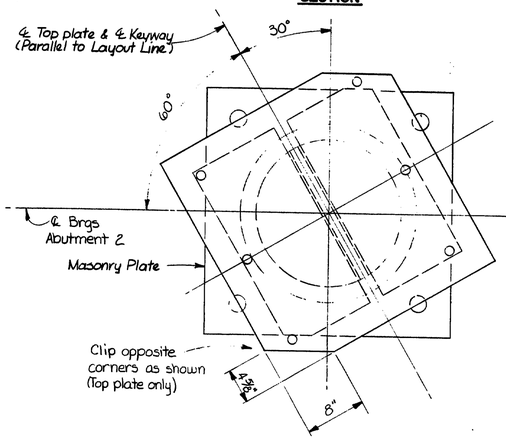
UNRESTRAINED BEARING

Provide for movement as shown for G2 & G3



SECTION

*Dimensions based on bearing heights shown. Final dimensions and pedestal finish elevations will depend on bearings supplied. For pedestal details, see sheet 5. (Details apply to both abutments)



PLAN

ABUTMENT 2 - G2 & G3 LATERALLY RESTRAINED BEARING

BEARING DESIGN DATA

LOCATION		TYPE	DESIGN LOAD-KIPS MAX. VERT.	MIN. VERT.	LATERAL	REMARKS
ABUT. 1	G2, G3	F	900	775	90*	* any direction
	G1, G4	LR	900	775	90*	* normal to Keyway
ABUT. 2	G2, G3	LR	900	775	90*	* normal to Keyway
	G1, G4	U	900	775	N.A.	

BEARING MOVEMENTS (INCHES) - ABUT. 2. (ALL BEARINGS)

From °F / To	100°	90	60	30	0	-30°	REMARKS
TEMP.	+0.58	+0.28	0	-0.28	-0.57	-0.85	+ Lengthening - North - Shortening - South
PRE-STRESS	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	Includes shrinkage & creep. Initial = 0.5" ±
INITIAL OFFSET	+1.00	+1.00	+1.00	+1.00	+1.00	+1.00	When Setting Brgs., offset 1.0" North (Parallel to Layout Line.)
TOTAL	+0.58	+0.28	0	-0.28	-0.57	-0.85	

Movement Rating: Calculated = 1.23"
Required = 2.00" (min.)

Note: Brgs Type LR at Abut. 1 and Type U at Abut. 2 provide for nominal transverse movements from prestress, shrinkage, creep and thermal effects.
Legend: F = Fixed LR = Laterally Restrained U = Unrestrained

Note:
For makeup of bearings shown including pot, elastomer, seals, TFE and stainless steel surfaces, see specifications.

Dimensions may vary to meet manufacturers standard, except that size and thickness of top and bottom plates shall not be reduced.

Preformed fabric pads shall conform to 713.03

Bearings shall be installed in accordance with 504.45, as applicable. Percussion drilling of anchor bolt holes (if drilled) will not be permitted.

The hold down requirements, as stated in the Special Provisions, Section 523, may be omitted.

0

PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	BBC	A.G. 11-95
CHECKED	RSH	
REVISIONS		
FIELD CHANGES		

DRAWING 44-132 42710-1

102-167

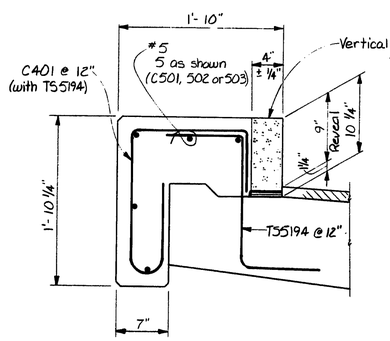
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

BEARINGS

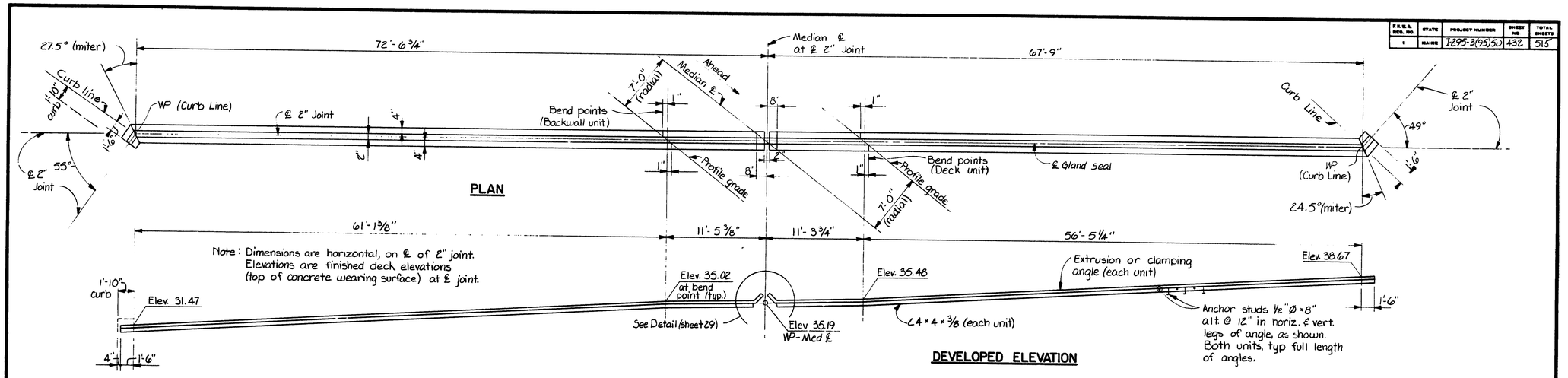
SHEET 26 OF 43 AUGUSTA, MAINE

F.A.P. & BRR. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(95)50	43J	515



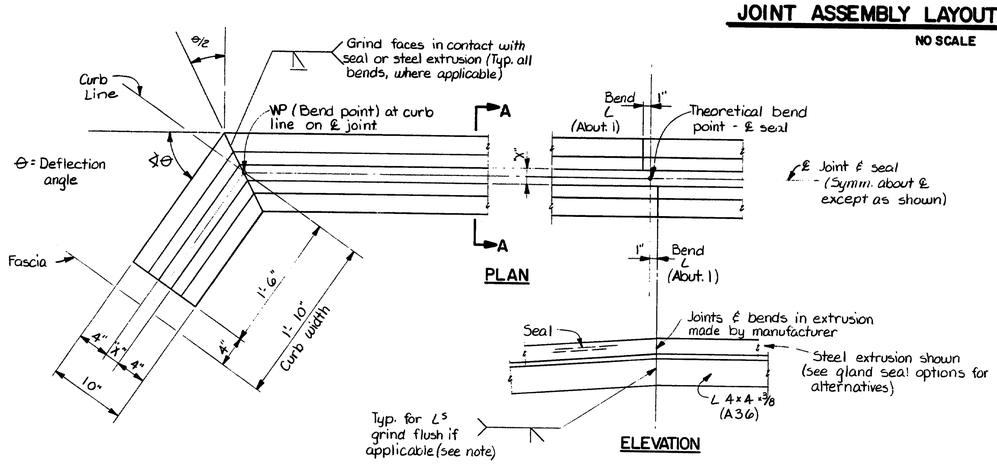
CURB SECTION

F.A.H.S. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	1295-3(95)50	432	515



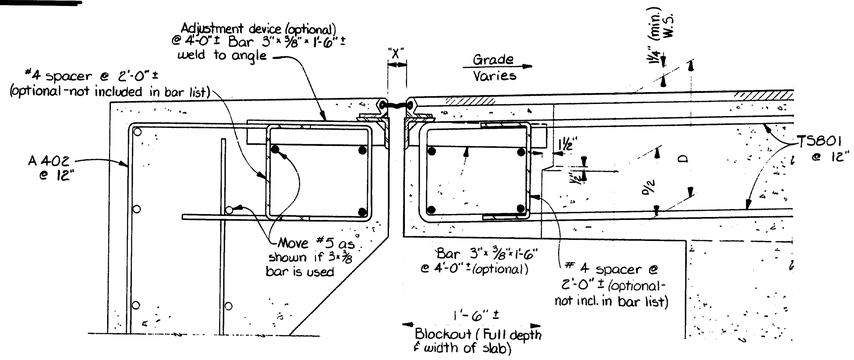
JOINT ASSEMBLY LAYOUT ABUTMENT 1

NO SCALE



DETAIL AT CORNERS

DETAIL AT CROWN BREAKS



SECTION A-A

Abutment 1 shown - Abut. 2 similar except grade

Note: Set expansion joints with down leg of L's vertical (not normal to grade).
Dimension "X" is normal to ℄ joint (not along ℄ roadway)
At About 1, "X" = 2" for all temperatures.
See table, sheet 29 for "X" at Abutment 2.
Details apply to both abutments except as shown or noted.
Paint all steel surfaces not in contact with steel or concrete.

PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	DBC	11-85
CHECKED	AG	
REVISIONS	DSA	
FIELD CHANGES		

DRAWING 44-132-49710-1

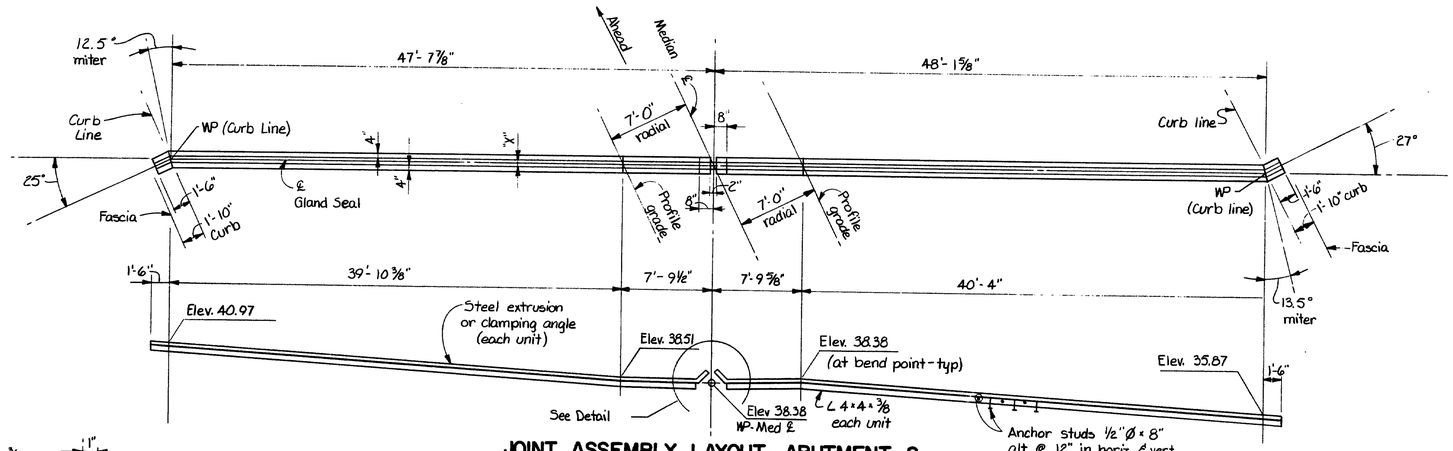
102-169

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

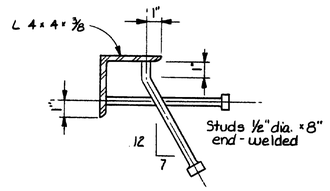
I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.
EXPANSION DEVICE
ABUTMENT 1

SHEET 28 OF 43 AUGUSTA, MAINE

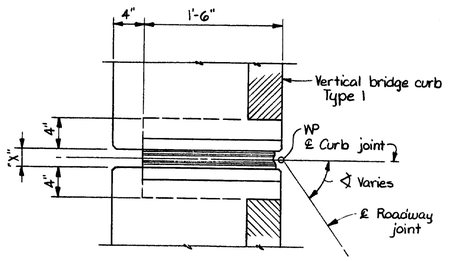
F.H.W.A. REGION NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(95)50	438	515



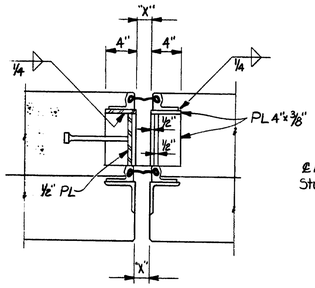
JOINT ASSEMBLY LAYOUT - ABUTMENT 2
NO SCALE



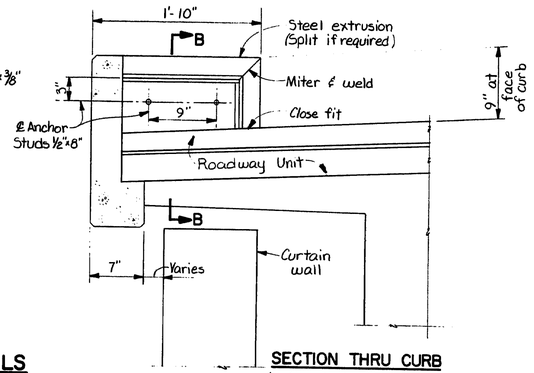
ANCHOR STUDS
NO SCALE



PLAN

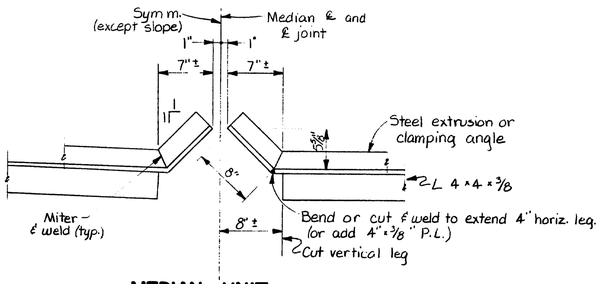


SECTION B-B



SECTION THRU CURB
(Left curb shown; right curb similar except slope)

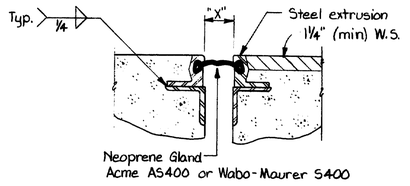
CURB UNIT DETAILS



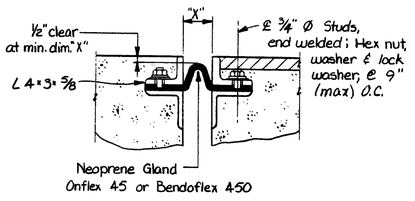
MEDIAN UNIT

Notes:

1. Each expansion device or joint seal unit consists of two pairs of matching elements (including curb and median units) and one pair of permanent concrete barrier units (sheet 30) and expansion dams as required.
2. Welding to reinforcing steel will be allowed in the top 1'-6" of the abutment backwalls.
3. Details shown apply to both abutments. See abutment and superstructure drawings for additional dimensions, slopes, skews and all other information necessary to fabricate and install the units.
4. Expansion devices shall be installed plumb (down leg of angles vertical), adjusted in elevation if required by roadway grade.
5. Concrete in slab blockouts at joint seals shall meet the requirements for superstructure concrete (Class P, f'c = 5000 psi). Blockouts may be utilized to place concrete in abutment curtain walls after tensioning end beams.



WITH STEEL EXTRUSION



WITH STEEL ANGLE

GLAND SEAL OPTIONS
NO SCALE

GLAND SEAL SETTING TABLE - ABUTMENT 2								
Dimension "X" (measured normal to ℄ of joint at time of setting joint)								
Temp	95°	75°	60°	45°	30°	15°	0°	-30°
"X" (at time of setting	1⅜"	1½"	1⅝"	1¾"	1⅞"	2"	2⅛"	2⅜"
* Final opening (max.)	1¾"	1⅞"	2"	2⅛"	2¼"	2⅜"	2½"	2¾"

* Thermal movements plus ⅜" ± shortening from creep of concrete (due to prestress) after joint assembly is installed.

PROJECT DESIGN ENGINEER	BY	DATE
PLANS	DESIGN - DETAILED	AG 11-85
	CHECKED	
	REVISIONS	
	FIELD CHANGES	

DRAWING 44-132-4711-1

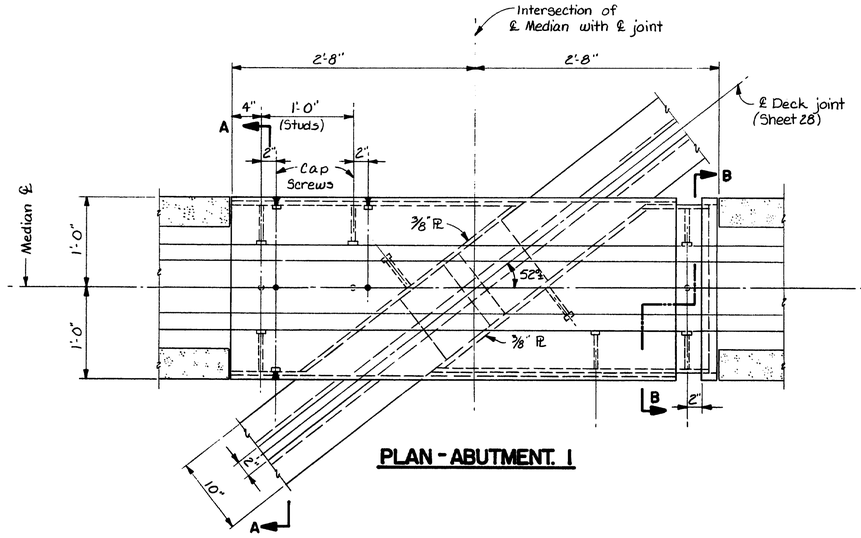
102-170

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

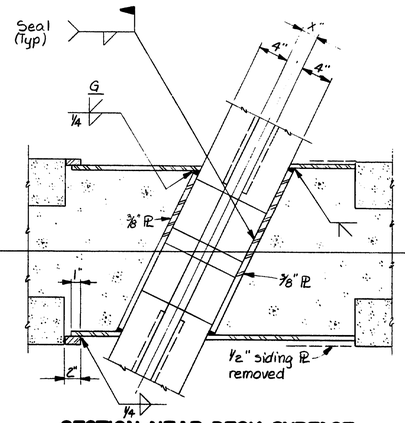
I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.
EXPANSION DEVICE
ABUTMENT 2

SHEET 29 OF 43 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	434	515

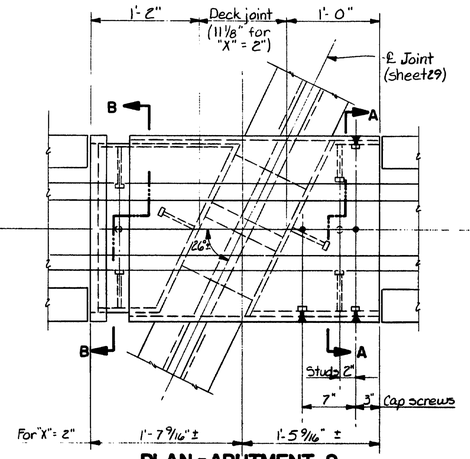


PLAN - ABUTMENT 1

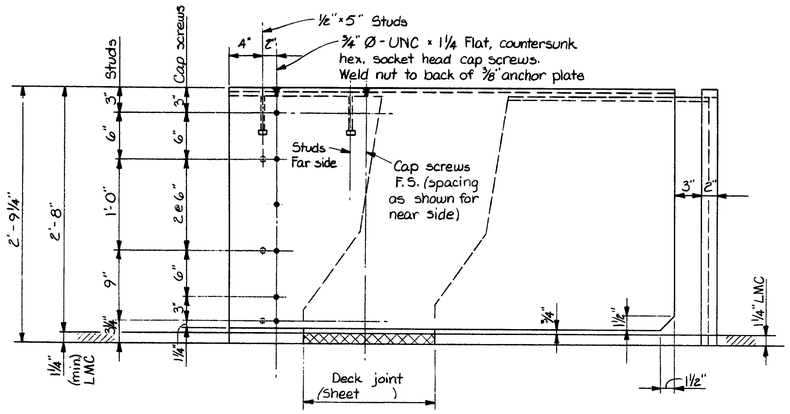


SECTION NEAR DECK SURFACE

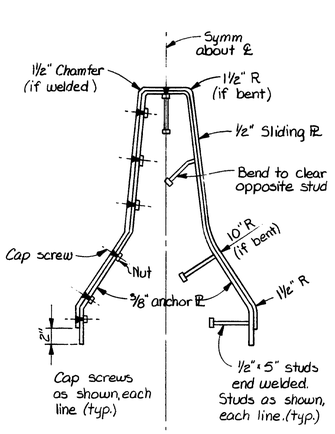
Abut. 2 shown - Abut. 1 similar Welds shown are typical where applicable.



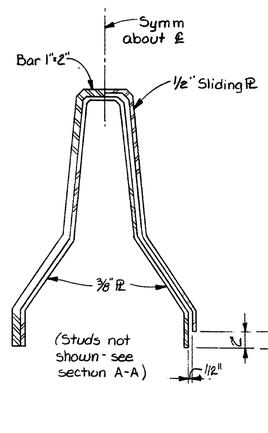
PLAN - ABUTMENT 2



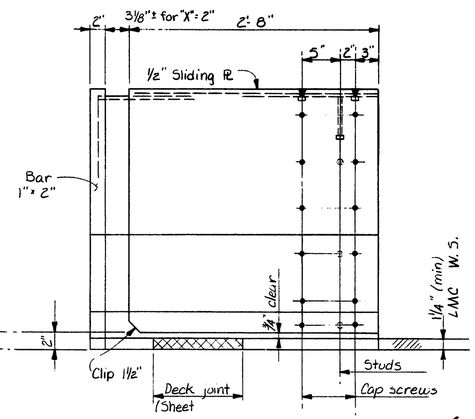
ELEVATION ABUTMENT 1



SECTION A-A



SECTION B-B



ELEVATION ABUTMENT 2

Note : Except as shown, outside dimensions shall conform to permanent concrete barrier, type II (sheet 27). Plates may be bent, welded or both. ASTM A36
Payment for furnishing and installing the permanent concrete barrier expansion joints will be considered incidental to items 520.211 and 520.212
Paint all steel surfaces not in contact with concrete.

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	AG	11/95
	CHECKED	JSH	
	REVISIONS		
	FIELD CHANGES		

PRINTING 44-132 45710-1

102-171

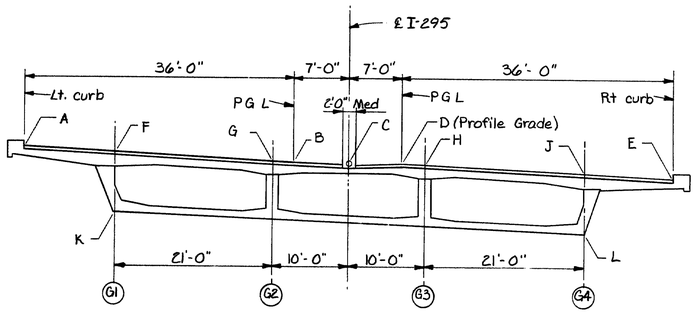
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

PERMANENT CONCRETE BARRIER, TYPE II EXPANSION DEVICE

SHEET 30 OF 43 AUGUSTA, MAINE

F.H.W.A. REGN. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(19)50	435	515

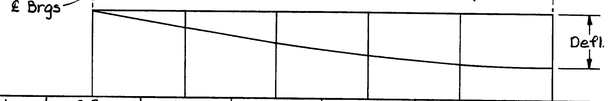


TRANSVERSE SECTION

1 0 2 3 4 5 6 7 8 9 10

Line A	5 spaces @ 10.50' = 52.50	(Left curb)
Line C	5 spaces @ 13.10' = 65.50'	(Med ℄)
Line E	5 spaces @ 16.04' = 80.20'	(Right curb)

Symmetrical about mid span



At	℄ Brg	0.1L	0.2L	0.3L	0.4L	0.5L
Line A	0	0.015 Ft.	0.032	0.047	0.057	0.060
Line C	0	0.020	0.043	0.063	0.076	0.080
Line E	0	0.025	0.053	0.078	0.094	0.100

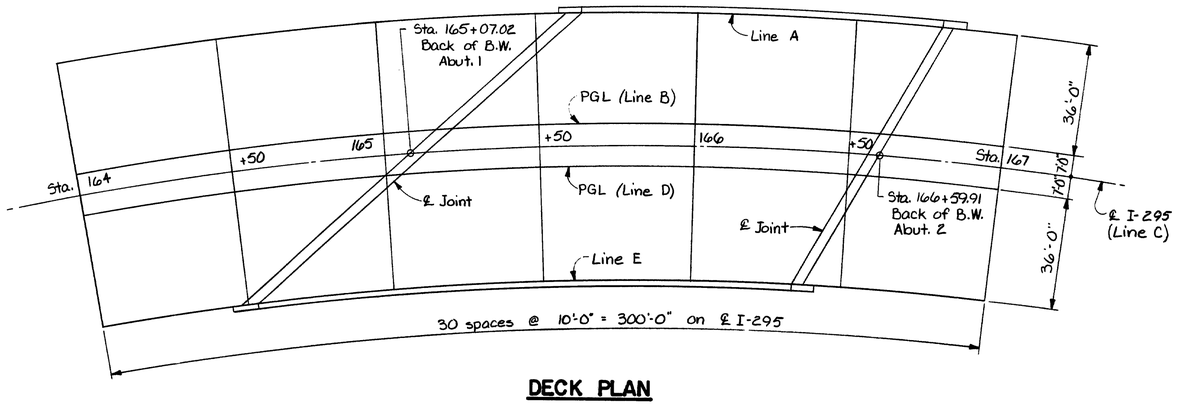
DEFLECTION DIAGRAM (Feet)

NO SCALE

Values shown are estimated ultimate deflections due to dead load and prestressing, including time effects. Initial deflections are about 1/3 the values shown. Dimensions are in feet.
Camber corrections in elevation tables (next sheet) are based on ultimate deflections tabulated above. Additional camber should be provided for estimated falsework deflection or settlement.

Superstructure Notes:

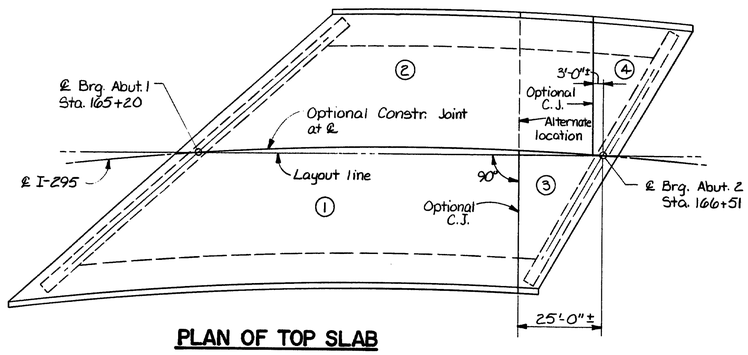
1. Reinforcing steel shall have a minimum cover of 2" unless otherwise indicated.
2. The placement sequence of the superstructure concrete shall be approved by the Engineer.
3. Mortar for bedding and for joints in the granite curb shall contain an approved non-shrink additive.
4. Protective coating for concrete surfaces shall be applied to the following areas:
   Top of concrete curbs
   Fascia and bottom horizontal surface (7") of concrete curbs.
   All concrete surfaces of concrete barrier.



DECK PLAN

10 0 10 20

See next sheet for deck and soffit elevations on grid shown.



PLAN OF TOP SLAB

Construction joints are optional at recommended locations shown.
Longitudinal C.J. at ℄ applies to both top and bottom slabs.
Transverse joint in top slab are intended to permit formwork removal.
If transverse joints are utilized, place sections ① and ② before placing ③ and ④. Any or all sections may be combined in one operation. (Total volume of concrete in top slab is approximately 460 cubic yards).
For slab blockouts at expansion joints, see sheet 28

PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED	ABC	A.G.	11-85
CHECKED	3571		
REVISIONS			
FIELD CHANGES			

BRUNING 44-132 45710-1

102-172

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

CONSTRUCTION DETAILS

SHEET 31 OF 43 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(65)50	436	515

At:		Station - ℄ I-295																														
Deck Elevations		164+00	+10	+20	+30	+40	+50	+60	+70	+80	+90	165+00	+10	+20	+30	+40	+50	+60	+70	+80	+90	166+00	+10	+20	+30	+40	+50	+60	+70	+80	+90	167+00
Profile Grade Elevations		32.026	32.340	32.649	32.953	33.252	33.546	33.844	34.117	34.395	34.668	34.935	35.198	35.455	35.707	35.954	36.195	36.431	36.663	36.888	37.109	37.325	37.535	37.740	37.940	38.135	38.324	38.508	38.688	38.861	39.030	39.194
Line A Lt. Curb	Fin. Grade											37.095	37.358	37.615	37.867	38.105	38.355	38.591	38.823	39.048	39.269	39.485	39.695	39.900	40.100	40.295	40.484	40.668	40.848	41.021	41.190	41.354
	Camber																		0	.014	.030	.045	.056	.059	.058	.047	.034	.017	0			
	Total																			39.062	39.299	39.530	39.751	39.959	40.158	40.342	40.518	40.685				
Line B PG (Lt)	F. G.													35.455	35.707	35.954	36.195	36.431	36.663	36.888	37.109	37.325	37.535	37.740	37.940	38.135	38.324	38.508				
	Camber													0	.002	.018	.035	.051	.064	.074	.077	.074	.062	.054	.039	.022	.007	0				
	Total														35.709	35.972	36.230	36.482	36.727	36.962	37.186	37.399	37.597	37.794	37.979	38.157	38.331					
Line C Med. ℄	F.G.									34.335	34.608	34.875	35.138	35.395	35.647	35.894	36.135	36.371	36.603	36.828	37.049	37.265	37.475	37.680	37.880	38.075	38.264	38.448	38.628			
	Camber													0	.016	.032	.048	.063	.074	.079	.080	.075	.064	.049	.033	.017	0					
	Total														35.663	35.926	36.183	36.434	36.677	36.907	37.129	37.340	37.539	37.729	37.913	38.092						
Line D PG (Rt)	F. G.												35.198	35.445	35.707	35.954	36.195	36.431	36.663	36.888	37.109	37.325	37.535	37.740	37.940	38.135	38.324					
	Camber												0	.015	.030	.048	.062	.075	.081	.083	.080	.072	.059	.044	.027	.011	0					
	Total													35.460	35.737	36.002	36.257	36.506	36.744	36.971	37.189	37.397	37.594	37.784	37.967	38.146						
Line E Rt. Curb	F.G.	29.866	30.180	30.489	30.793	31.092	31.386	31.674	31.957	32.235	32.508	32.775	33.038	33.295	33.547	33.794	34.035	34.271	34.503	34.728	34.949	35.165	35.375	35.580	35.780	35.975	36.164					
	Camber							0	.014	.031	.047	.062	.077	.088	.096	.099	.099	.095	.087	.075	.061	.045	.029	.013	0							
	Total								31.971	32.266	32.555	32.837	33.115	33.383	33.643	33.893	34.134	34.366	34.590	34.803	35.010	35.210	35.404	35.593								
Line F Girder G1	F.G.																37.635	37.871	38.103	38.328	38.549	38.765	38.975	39.180	39.380	39.575	39.764	39.948	40.128			
	Camber																0	.004	.020	.036	.051	.061	.065	.063	.054	.041	.025	.009	0			
	Total																	37.875	38.123	38.364	38.600	38.826	39.040	39.243	39.434	39.616	39.789	39.957				
Line G Girder G2	F.G															35.887	36.134	36.375	36.611	36.843	37.068	37.289	37.505	37.715	37.920	38.120	38.315	38.504	38.688			
	Camber															0	.012	.028	.039	.059	.070	.075	.074	.068	.055	.040	.025	.013	0			
	Total																36.146	36.403	36.650	36.902	37.138	37.364	37.579	37.783	37.975	38.160	38.340	38.517				
Line H Girder G3	F.G.											34.755	35.018	35.275	35.527	35.774	36.015	36.251	36.483	36.708	36.929	37.145	37.355	37.560	37.760	37.955	38.144					
	Camber											0	.003	.021	.037	.053	.067	.079	.084	.085	.080	.070	.056	.041	.026	.009	0					
	Total												35.021	35.296	35.564	35.827	36.082	36.330	36.567	36.793	37.009	37.215	37.411	37.601	37.786	37.964						
Line J Girder G4	F.G.								32.677	32.955	33.228	33.495	33.758	34.015	34.267	34.514	34.755	34.991	35.223	35.448	35.669	35.885	36.095	36.300	36.500	36.695						
	Camber								0	.002	.019	.034	.040	.065	.078	.088	.092	.094	.089	.083	.070	.055	.039	.024	.007	0						
	Total									32.957	33.247	33.529	33.798	34.080	34.345	34.602	34.847	35.085	35.312	35.531	35.739	35.940	36.134	36.324	36.507							
Soffit Elevations																																
Line K (Left corner) (7.604' below F)	F.G.																	30.267	30.500	30.724	30.945	31.161	31.371	31.576	31.776	31.971	31.971	32.160	32.344			
	Camber																	.004	.020	.036	.051	.061	.065	.063	.054	.041	.041	.025	.009			
	Total																	30.271	30.520	30.760	30.996	31.222	31.436	31.639	31.830	32.012	32.012	32.185	32.353			
Line L (Right corner) (7.604' below J)	F.G.									25.351	25.624	25.891	26.154	26.411	26.663	26.910	27.151	27.387	27.619	27.844	28.065	28.281	28.491	28.696	28.896							
	Camber									.002	.019	.034	.040	.065	.078	.088	.092	.094	.089	.083	.070	.055	.039	.024	.007							
	Total									25.353	25.643	25.925	26.194	26.476	26.741	26.998	27.243	27.481	27.708	27.927	28.135	28.336	28.530	28.720	28.903							

Deck Elevations at Abutments		Abutment 1		Abutment 2	
		Back of Backwall	℄ Exp. Joint	Back of Backwall	℄ Exp. Joint
Line A (Lt Curb)	Station	165+58.83	165+63.44	166+79.88	166+76.58
	Elevation	38.57	38.67	41.02	40.97
Line B (PG - Lt.)	Station	165+15.97	165+20.98	166+63.29	166+59.84
	Elevation	35.36	35.48	38.57	38.51
Line C (Med ℄)	Station	165+07.02	165+12.11	166+59.91	166+56.44
	Elevation	35.05	35.19	38.44	38.38
Line D (PG - Rt)	Station	164+97.84	165+03.03	166+56.49	166+52.98
	Elevation	34.88	35.02	38.44	38.38
Line E (Rt. Curb)	Station	164+46.67	164+52.42	166+38.01	166+34.34
	Elevation	31.31	31.47	35.94	35.87

Note:

Deck elevations given are top of LMC wearing surface (1¼" above surface of structural concrete slab).

Abutment elevations are finished grade, top of concrete, or grade line at ℄ expansion joints.

Camber ordinates included above are based on ultimate dead load and prestress deflections. No allowance is included for falsework settlement or deflection.

For elevations at end beams, bearings and bridge seats, see sheets 3, 8, 23 & 24.

PROJECT DESIGN ENGINEER	BY	DATE
PLANS DESIGN - DETAILED	A.G.	11-85
CHECKED		
REVISIONS		
FIELD CHANGES		

BRUNING 44-132 45710-1

102-173

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

DECK AND SOFFIT ELEVATIONS

SHEET 32 OF 43 AUGUSTA, MAINE

REINFORCING STEEL SCHEDULE

STRAIGHT BARS

MARK	NO.	LENGTH	LOCATION
			ABUTMENT 1
F501	618	4'-6"	Footing dowels - Vertical
F601	86	13'-6"	Transverse - top
F602 Thru F606	2 ea.	3'-0" to 11'-8" (2'-2" increments)	do. (ends)
F801	20	60'-0"	Longitudinal, Top & Bottom
F802	8	59'-0"	do. East end
F803	2	54'-10"	do.
F804	2	52'-0"	
F805	2	49'-2"	
F806	2	47'-9"	
F807	2	44'-8"	
F808	2	44'-0"	do.
F809	2	35'-8"	Longit. Top & Bot. West end
F810	2	36'-2"	do.
F811	2	38'-8"	
F812	2	39'-10"	
F813	2	42'-2"	
F814	2	44'-6"	
F815	8	47'-0"	do.
A402	-	-	NOT USED
A405	52	3'-0"	Vertical Dowels - Br. Seat Curtain Walls
A406	28	8'-0"	Vertical E.F. S.E. Curtain Wall
A407	8	4'-0"	Horiz. Dowels, S.E. Corner Curtain Wall
A409	16	13'-2"	Horiz., Ea. Face S.E. Curtain Wall
A411	24	10'-11"	Vert., Ea. Face N.W. Curtain Wall
A412	22	11'-9"	Horiz., Ea. Face N.W. Curtain Wall
A506	72	6'-6"	Vert. Bars B Front Wall
A507	39	8'-0"	do.
A508	38	9'-6"	do.
A509	49	11'-3"	Vert Bars "B" Backwall & Corner
A510	127	13'-0"	Vert Bars "C" Backwall & Corner
A511	66	14'-6"	Vert. Bars C Backwall
A512	64	16'-0"	do.
A513	35	17'-6"	do.
A514	69	7'-9"	Vert bars D Backwall
A515	52	9'-6"	do.
A516	66	9'-0"	do.
A517	64	9'-8"	Vertical Bars D Backwall
A518	35	10'-6"	do.
A519	72	10'-0"	Horiz. in cross-walls
A521	166	30'-0"	Horiz. - Bars E & F
A522	46	42'-0"	do.
A523	31	5'-0"	Horiz. dowels
A529	132	10'-7"	Bridge Seat, Transverse, Bottom
A531	4	6'-7"	Bridge Seat Transverse Top & Bottom (ends)
A532	4	8'-0"	do.
A533	4	9'-5"	do.
A801	14	40'-0"	Br. Seat T & B Longitudinal
A802	28	39'-0"	do.
A803	4	35'-6"	do., S.E. end
A804 Thru A808	2 ea.	22'-0" to 32'-0" (2'-6" increments)	do.
A809	4	25'-0"	Br. Seat T & B N.W. end
A810 Thru A814	2 ea.	15'-0" to 23'-0" (2'-0" increments)	do.
AC503	14	6'-7"	Curbs - Longitudinal
W401	18	16'-6"	Vert., ea. face S.E. wing
W403	6	18'-6"	Vert., ea. face N.W. wing
W404 Thru W410	2 ea.	18'-3" to 15'-9" (5" increments)	do.
W411 Thru W415	2 ea.	7'-10" to 6'-2" (5" increments)	do.
W501	19	8'-6"	Horiz., Outside Face, & Top S.E. Wing
W502	8	9'-9"	Horiz. Outside, Face N.W. Wing
W503	7	14'-9"	do.
W504	1	12'-4"	do.
W505	1	9'-11"	do.
W506	2	7'-6"	do.
W601	32	9'-2"	Horiz., Fill Face S.E. Wing
W701	15	10'-0"	Horiz., Fill Face N.W. Wing
W702	13	15'-0"	do.
W703	1	12'-7"	do.
W704	1	10'-2"	do.

WING WALL DOWELS

WING WALLS

CURB & BARRIER

Note : Curb reinforcement

continued on sheet 35.

BENT BARS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
		ABUTMENT 1												
F816	97	16'-2"	EP			1'-4"	13'-6"	1'-4"						Transverse, Bot
F817 Thru F821	2 ea.	5'-8" to 14'-4" (2'-2" increments)	EP			1'-4"	3'-0" to 11'-8"	1'-4"						do. (end)
A401	143	4'-6"	SJ		1'-7"	8"	1'-7"	8"						Approach Slab Seat
A403	8	7'-6"	EP			2'-3"	3'-0"	2'-3"						Bearing pedestals
A404	8	10'-6"	R									3'-1"	1'-6½"	do.
A408	8	7'-7"	SJ		5'-6"	1'-5"	8"				4'-6"			Backwall, Horiz. SE. Corner
A410	8	4'-9"	SK	8"	2'-9"	8"	8"				1'-7"			do.
A413	11	5'-5"	SK	8"	3'-5"	8"	8"				2'-7"			Backwall, Horiz. N.W. Corner
A501	1.37	8'-9"	EP	2'-0"	1'-3"	2'-9"	2'-9"							Top of Backwall
A502	48	10'-3"	L	3'-6"	6'-9"									Bars A (Vert.) Front Wall
A503	33	11'-9"	L	3'-6"	8'-3"									do.
A504	32	13'-3"	L	3'-6"	9'-9"									do.
A505	14	14'-9"	L	3'-6"	11'-3"									Bars A, Vert. Front Wall & Corner
A520	27	18'-8"	HB	6"	5'-0"	7'-8"	5'-0"	6"						Horizontal - in Cross - Walls
A524	10	6'-0"	V				5'-0"	1'-0"			7"			Horiz. dowels S.E. Corner
A525	10	20'-4"	SK	6"	15'-4"	4'-6"					10'-1"			Horiz. - N.W. Corner
A526	10	16'-0"	V				15'-6"	6"			4½"			do.
A527	7	18'-10"	SK	10"	17'-0"	1'-0"					9'-9"			Horiz. SE. Corner
A528	35	17'-9"	L	1'-0"	16'-9"									do.
A530	126	11'-5"	L	10"	10'-7"									Bridge Seat, Transverse, Top
A590	11	10'-0"	V				5'-0"	5'-0"			3'-3⅛"			Horiz. dowels in N.W. Corner
A591	11	11'-0"	V				5'-6"	5'-6"			3'-7½"			
		WINGWALL DOWELS												
AW601	32	8'-0"	V				4'-0"	4'-0"			2'-0"			Fill Face SE. Wing
AW701	11	12'-0"	V				6'-0"	6'-0"			2'-0"			Fill Face N.W. Wing
AW702	20	13'-2"	SJ		6'-0"	6'-0"	1'-2"				2'-0"			do.
		WINGWALLS												
W402	21	2'-9"	EP			8"	1'-5"	8"						Top of Wall (Both Wings)
W507	2	16'-4"	SJ		12'-9"	2'-9"	10"				4'-11"			Top - N.W. Wing
		CURB & BARRIER												
AB501*	16	3'-10"	L	10"	3'-0"	*Incidental to pay item 526.32 (Not included in item 503.14)								Dowels - Med. Barrier
AC501	14	6'-8"	HB	6"	1'-6"	1'-4"	1'-6"	1'-4"		6"				Curbs - Transverse
AC502	12	2'-6"	EP			6"	1'-6"	6"						do
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

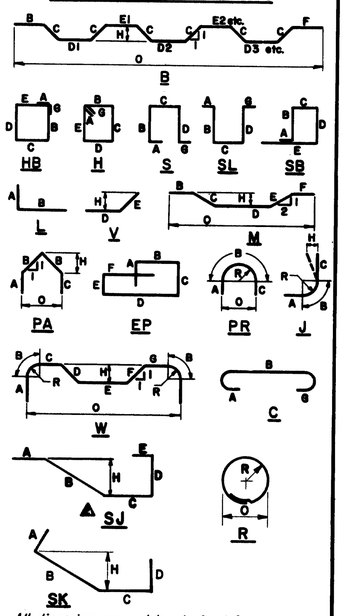
DESIGN - DETAIL CHECKED REVISIONS FIELD CHANGES

PLANS

DATE	BY	PAGE
11-85	AG	23

FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	433	515

TYPE - BENDING DIAGRAMS



All dimensions are out to out of reinf. bar

Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 318. ⚠

Reinforcing Bar : A 615 Grade 60 Epoxy Coated A 615M

GENERAL NOTES

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.
   Mark (A 502) bar size - #5
   Mark (P 1001) bar size - #10
   Mark (S 603) bar size - #6
2. Each truss bar, Type B, may be replaced by two (2) straight bars (one top & one bottom) of the same bar size as the truss bar. Payment in either case shall be based on truss bars as scheduled on plans.

102-174

REVISIONS	DATE
⚠ New Bent Bar Type SJ	9-26-88
⚠ Revised ACI Standard	5-12-89

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

REINFORCEMENT ABUTMENT 1

REINFORCING STEEL SCHEDULE

STRAIGHT BARS

MARK	NO.	LENGTH	LOCATION
			ABUTMENT 2
F501	538	4'-6"	Footing dowels-Vert
F601	76	13'-6"	Transverse, Top
F822	20	50'-0"	Longit. Top & Bottom
F823	20	31'-0"	do. East end
F824	18	50'-0"	do. West end
F825	2	35'-0"	do.
F826	4	21'-0"	do.
F827	4	16'-4"	Transverse, T & B, West edge of Footing
F828	2	11'-6"	Transv., T & B, East end
F829	2	7'-8"	do.
A405	18	3'-0"	Vertical dowels - Br. Seat Curtain Wall
A414	20	8'-6"	Curtain Wall Vertical, ea. face
A415	18	8'-6"	Curtain Wall, Horiz., Ea. face
A519	63	10'-0"	Horiz. - in cross walls
A523	6	5'-0"	Horiz. dowels, Breastwalls, S.E. Corner
A529	96	10'-7"	Bridge seat, Transverse, Bottom
A538	53	7'-9"	Front Wall & Corner Vertical Bars "B"
A539	28	8'-11"	Front Wall Bars "B"
A540	29	10'-1"	do.
A541	23	11'-3"	do.
A542	61	13'-2"	Backwall & Corner Vert. Bars "C"
A543	44	14'-4"	Backwall Bars "C"
A544	46	15'-6"	do.
A545	40	16'-8"	do.
A546	61	8'-6"	Backwall & Corner Vert. Bars "D"
A547	44	8'-6"	Backwall, Bars "D"
A548	46	8'-6"	do.
A549	40	8'-6"	do.
A550	50	40'-0"	Front & Backwalls, Horiz. Bars "E" & "F"
A551	54	25'-0"	do
A552	44	33'-0"	do.
A553	18	30'-0"	do.
			GORE SECTION
A554	35	8'-0"	Backwall, West Corner & Cross-wall, Vert.
A555	20	13'-6"	Front Wall, Vertical
A556	20	20'-0"	Front Wall, Horiz. E.F.
A557	11	13'-0"	West end wall, Horiz. inside face
A559	11	11'-0"	Horiz. in cross wall
A561	20	6'-0"	Horizontal, with A556
A562	34	6'-0"	Vertical Dowels

MARK	NO.	LENGTH	LOCATION
			GORE SECTION
A563	22	12'-0"	Vert, Wall, near West Curb.
A564 thru A577	1 ea.	12'-2" to 16'-6" (4" increments)	Gore Wall, Front Face
A578	11	16'-8"	Gore Walls, Front and West side
A580	5	11'-6"	Vertical Backwall West Corner
A584	11	5'-0"	Horiz. dowels, Backwall West Corner
A604	11	13'-0"	West end wall horiz.
A606	20	24'-6"	Backwall, E.F. (Gore Section)
A608	12	19'-6"	Gore Section, Front wall horiz.
A609	2	14'-0"	do.
A615	2	8'-0"	do.
A616	3	6'-0"	At access opening, Gore section
A701	23	15'-6"	Gore Section, End Wall, Vert.
A702 thru A714	1 ea.	12'-0" to 16'-4" (4" increments)	Gore Section, Front Wall, Vertical
A715	9	16'-9"	West end wall, Vertical
A815 thru A821	2 ea.	37'-6" to 42'-6" (10" increments)	Bridge Seat, Longit, T & B
A822	28	30'-0"	do.
A823 thru A829	2 ea.	41'-3" to 38'-6" (5½" increments)	do.
A830	2	22'-0"	do.

MARK	NO.	LENGTH	LOCATION
			S.E. WINGWALL
W416	4	15'-6"	Vert, Ea. Face
W417 thru W429	2 ea.	5'-0" to 15'-0" (10" increments)	do.
W507	2	8'-0"	Horizontal Outside Face
W508	2	10'-4"	do.
W509	2	12'-9"	do.
W510	5	14'-6"	Horiz. Outside Face
W705	2	8'-0"	Horiz., Fill Face
W706	2	10'-4"	do.
W707	2	12'-9"	do.
W708	10	14'-6"	do.
			CURB & BARRIER
AC503	7	6'-7"	Curb-Longit. S.E. Corner
AC601	7	6'-7"	do. N.W. Corner

REINFORCING STEEL SCHEDULE

STRAIGHT BARS

MARK	NO.	LENGTH	LOCATION
	Abutments 1 & 2		
	4 End Posts		
EP401	32	1'-10"	End Post Dowels
EP405	16	1'-5"	End Post
EP508	16	4'-0"	End Post
	2 Approach Slabs		
Abut 1			
*AS400	64	30'-0"	
*AS401	16	25'-0"	
*AS600	171	15'-0"	
Abut 2			
*AS400	48	30'-0"	
*AS402	16	9'-0"	
*AS600	171	15'-0"	
* Incidental to pay Item 502.310 (Not Included in Item 503.14)			

MARK	NO.	LENGTH	LOCATION

MARK	NO.	LENGTH	LOCATION
Curb Reinforcement - continued from sheets 33 and 34: (Both abutments)			

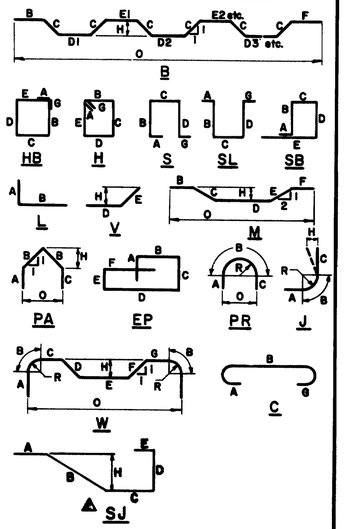
BENT BARS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
	End Posts													
EP402	16	4'-9"	S		2'-1"	7"	2'-1"							End Post
EP403	16	4'-9"	H	4"	1'-0"	1'-0"	1'-0"	1'-0"		4"				
EP404	16	3'-1"	S		1'-3"	7"	1'-3"							
EP408	12	4'-3"	S		1'-10"	7"	1'-10"							
EP409	8	4'-2"	S		1'-10"	6"	1'-10"							
EP410	4	4'-6"	S		1'-10"	10"	1'-10"							End Post
EP501	16	5'-3"	V				3'-0"	2'-3"			4"			End Post
EP502	12	4'-11"	S		1'-11"	7"	1'-11"			6"				
EP503	8	4'-10"	S		1'-11"	6"	1'-11"			6"				End Post
EP504	4	6'-5"	H	5"	1'-11"	10"	1'-11"	10"		5"				
AC504	7	10'-4"	HB	6"	3'-2"	1'-6"	3'-2"	1'-6"		6"				Curb ends, vert.
AC505	6	3'-7"	L	10"	2'-9"									do. horiz.

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	439	515

TYPE-BENDING DIAGRAMS



All dimensions are out to out of reinf. bar

Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 318. ⚠

Reinforcing Bar: ASTM A615 Grade 60 Epoxy Coated

GENERAL NOTES

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.
   Mark (A502) bar size - #5
   Mark (P1001) bar size - #10
   Mark (S603) bar size - #6
2. Each truss bar, Type B, may be replaced by two (2) straight bars (one top & one bottom) of the same bar size as the truss bar. Payment in either case shall be based on truss bars as scheduled on plans.

102-176

REVISIONS	DATE
⚠ New Bent Bar Type SJ	9-26-83
⚠ Revised ACI Standard	5-12-83

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

ABUTMENTS 1 & 2

SHEET 35 OF 43 AUGUSTA, MAINE

PLANS	BY	DATE
DESIGN - DETAIL	RBC	11/85
CHECKED	SRC	
REVISIONS		
FIELD CHANGES		

REINFORCING STEEL SCHEDULE

STRAIGHT BARS

MARK	NO.	LENGTH	LOCATION
BOTTOM SLAB			
S502	115	22'-0"	Transverse, Bott.
S506	316	30'-0"	Longit., T&B
S548 thru S576	2 ea.	17'-0" to 45'-0" (1'-0" increments)	Longit., T&B (South end)
S577 thru S590	2 ea.	33'-3" to 45'-2" (11" increments)	Longit., T&B (South end)
S591 thru S5116	1 ea.	12'-6" to 33'-4" (10" increments)	Transverse, Top (S. end Left)
S5117 thru S5132	1 ea.	10'-6" to 23'-0" (10" increments)	Transverse, Bott. (S. end Left)
S5145 thru S5149	1 ea.	13'-0" to 20'-4" (1'-10" increments)	Transverse, Bott. (North End-center)
S5150 thru S5162	1 ea.	11'-0" to 33'-0" (1'-10" increments)	Transverse, Top (North End-center)
S5163 thru S5168	1 ea.	13'-0" to 22'-2" (1'-10" increments)	Transverse, Bott. (North End-Right)
S5169	24	6'-0"	T&B at access manholes

MARK	NO.	LENGTH	LOCATION
GIRDERS (WEBS)			
(LONGITUDINAL, EACH FACE)			
G501	100	40'-0"	All Girders - horiz.
G502	10	43'-0"	G4 - horiz.
G503	10	28'-6"	G3 - horiz.
G504	20	28'-0"	G2 - horiz.
G505	10	40'-6"	G1 - horiz.
END BEAMS			
(AT TENDON ANCHORS)			Threaded dowel splice
D403	16	8'-8"	6'-0" 2'-8" Abut. 1 - G1 & G4
D404	16	6'-8"	4'-0" 2'-8" do. do.
D405	16	7'-4"	5'-0" 2'-4" do. G2 & G3
D406	16	5'-4"	3'-0" 2'-4" do. do.
D407	32	6'-4"	4'-0" 2'-4" Abut. 2 G2 & G3
D408	32	6'-8"	4'-0" 2'-8" do. G1 & G4
D409	16	6'-2"	Vert, E.F., Ends
D602	4	33'-0"	Abut. 1 - Longit., each Face
D603	8	35'-0"	do.
D604	4	36'-0"	do.
D605	8	47'-0"	Abut. 2 - Longit. ea face
D901	3	49'-4"	Abut. 1 - Longit., Bottom
D902	3	35'-10"	do.
D903	3	52'-0"	do.
D904	2	60'-0"	Abut. 2 - Longit., Bottom
D905	2	35'-0"	do.
D906	6	48'-3"	Abut. 2 - Longit., Top
D1001	4	35'-0"	Abut. 1 - Longit., Top
D1002	4	38'-3"	do.
D1003	4	39'-6"	do.
D1004	4	37'-0"	do.

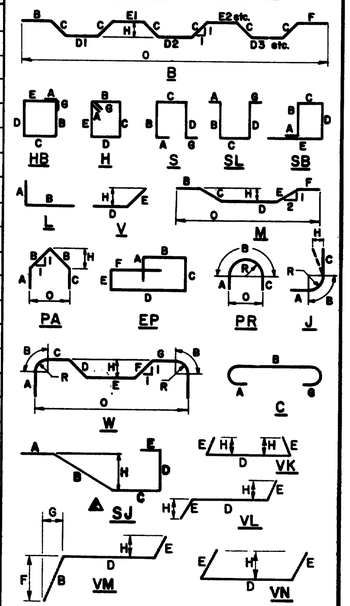
BENT BARS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
BOTTOM SLAB														
S501	197	23'-6"	V				22'-0"	1'-6"			1'-5½"			Transverse, Bott.
S503	197	33'-6"	V				32'-0"	1'-6"			1'-5½"			Transverse, Top
S504	236	8'-0"	V				6'-6"	1'-6"			1'-4½"			d.o. outside webs
S505	242	11'-0"	V				5'-6"	5'-6"			1'-8"			d.o. interior webs
S507 thru S547	2 ea.	9'-6" to 42'-10" (10" increments)	V				8'-0" to 41'-4"	1'-6"			1'-5½"			Transverse, T&B (South End - Right)
S5133 thru S5144	2 ea.	11'-0" to 31'-2" (1'-10" increments)	V				9'-6" to 29'-8"	1'-6"		1'-5½"				Transverse T&B (North End Left)
GIRDERS (WEBS)														
(VERTICAL STIRRUPS)														
G601	345	10'-5"	VL				7'-5"	1'-6"			1'-5½"			G4 - Outside Face
G602	220	10'-5"	VN				7'-5"	1'-6"			1'-5½"			G4 - Inside Face
G603	294	12'-11"	VM		4'-0"		7'-5"	1'-6"	3'-10½"	1'-0"	1'-5½"			G4 - Inside Face
G604	840	9'-4"	VK				7'-6"	10½"	(135° hooks)		6½"			G3 - Each Face
G605	758	8'-9"	VK				6'-11"	10½"	(d.o.)		6½"			G2 - Each Face
G606	148	10'-8"	VL				7'-8"	1'-6"			1'-5"			G1 - Outside Face
G607	150	10'-8"	VN				7'-8"	1'-6"			1'-5"			G1 - Inside Face
G608	247	13'-2"	VM		4'-0"		7'-8"	1'-6"	3'-9¼"	1'-4"	1'-5"			G1 - Inside Face
END BEAMS														
D401	40	7'-6"	SL		2'-0"	3'-6"	2'-0"							Bearing areas
D402	24	11'-9"	SL		2'-0"	7'-9"	2'-0"							do.
D501	28	9'-3"	SL		3'-0"	3'-3"	3'-0"							Ends of End Beams
D502	16	4'-3"	SL		6"	3'-3"	6"							Ties - at End Beam tendon Anchorage
D503	32	6'-0"	C	10"	5'-2"				–					Ties - at Girder tendon Anchorage
D504	24	5'-0"	C	10"	4'-2"				–					do.
D601	115	20'-4"	HB	1'-0"	7'-7"	3'-2"	7'-7"	1'-0"						Vertical Stirrups
D607	12	19'-2"	HB	1'-0"	7'-0"	3'-2"	7'-0"	1'-0"						Vertical Stirrups at Girder Tendon Anchorages
D608	10	18'-2"	HB	1'-0"	7'-0"	2'-2"	7'-0"	1'-0"						
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

DESIGN - DETAIL BY MJP
CHECKED 12/DEC
REVISED
FIELD CHANGES
PLANS

FHWA ENG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	440	515

TYPE - BENDING DIAGRAMS



All dimensions are out to out of reinf. bar
Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 318.
Reinforcing Bar: ASTM A615 Grade 60 Epoxy Coated

GENERAL NOTES

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.
   Mark (A 502) bar size - #5
   Mark (P 1001) bar size - #10
   Mark (S 603) bar size - #6
2. Each truss bar, Type B, may be replaced by two (2) straight bars (one top & one bottom) of the same bar size as the truss bar. Payment in either case shall be based on truss bars as scheduled on plans.

102-177

REVISIONS	DATE
⚠ New Bent Bar Type SJ	9-26-83
⚠ Revised ACI Standard	5-12-83

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

REINFORCEMENT - BOTTOM SLAB, GIRDERS & END BEAMS

SHEET 36 OF 43 AUGUSTA, MAINE

REINFORCING STEEL SCHEDULE

STRAIGHT BARS

MARK	NO.	LENGTH	LOCATION
TOP SLAB			
TS501	229	23'-0"	Transverse, bottom
TS502	109	21'-6"	do.
TS505	237	37'-0"	Transverse, top
TS506	119	24'-0"	do.
TS508 thru TS531	2 ea.	16'-0" to 36'-1½"	Transverse, Top & Bott. (South end) (10½" increments)
TS532 thru TS546	1 ea.	13'-6" to 25'-2"	Transverse, Bottom (South end) (10" increments)
TS547	4	12'-0"	S.E. corner, S. end of slab, skew, Top
TS548	12	40'-0"	End of Slab (Skew) T&B, South end.
TS549	4	27'-0"	do.
TS550 thru TS572	2 ea.	13'-6" to 31'-10"	Transverse, Top & Bott. (South end) (10" increments)
TS573 thru TS5103	1 ea.	12'-6" to 36'-3"	Transverse, Top (South end) (9½" increments)
TS5104 thru TS5109	2 ea.	31'-0" to 36'-0"	Longitudinal, Top & Bot. (South end) (1'-0" increments)
TS5110	6	37'-0"	d.o. - Includes 4 bars in slab edge
TS5111 thru TS5121	2 ea.	29'-0" to 39'-0"	Longit., T&B (South end) (1'-0" increments)
TS5122 thru TS5138	2 ea.	13'-0" to 29'-0"	Longit, T&B, S. End (1'-0" increments)
TS5139	6	8'-0"	d.o. - Includes 4 bars in slab edge.
TS5140 thru TS5162	2 ea.	9'-0" to 27'-4"	Longit. T & B (South end) (10" increments)
TS5163	556	30'-0"	Long., Top & Bottom, except South end. (Includes 36 bars in slab edges)
TS5164 thru TS5171	2 ea.	19'-6" to 32'-4"	Transverse, Top & Bottom, North end (1'-10" increments)
TS5172 thru TS5182	2 ea.	17'-0" to 35'-4"	d o. (1'-10" increments)
TS5183 thru TS5191	2 ea.	20'-0" to 34'-8"	d o. (1'-10" increments)
TS5192	8	40'-0"	End of Slab (Skew) T&B, North end
TS5193	4	22'-6"	d o.
TS5195	4	10'-0"	N.W. Corner, North end of slab, Skew, Top

CURB LONGITUDINAL

MARK	NO.	LENGTH	LOCATION
C501	40	30'-0"	Right & Left Curbs
C502	5	35'-0"	Left Curb
C503	5	35'-6"	Right Curb

Note: Curb bars on abutments are listed with abutment bars.

CONCRETE BARRIER

MARK	NO.	LENGTH	LOCATION
*BR501	20	30'-0"	Longitudinal
*BR502	5	33'-0"	do.
*BR503	5	5'-2"	do. (Abut. 1) **
*BR504	5	3'-2"	do. (Abut. 2) **

* Reinforcement in permanent concrete barrier, including slab dowels TS507 and abutment dowels AB501, will not be paid for under Pay Item 503.14. Payment for these bars will be considered incidental to item 526.32.

** plus 1 vertical, ends of barrier

APPROACH SLAB

MARK	NO.	LENGTH
AS400	112	30'-0"
AS401	32	12'-6"
AS600	340	15'-0"

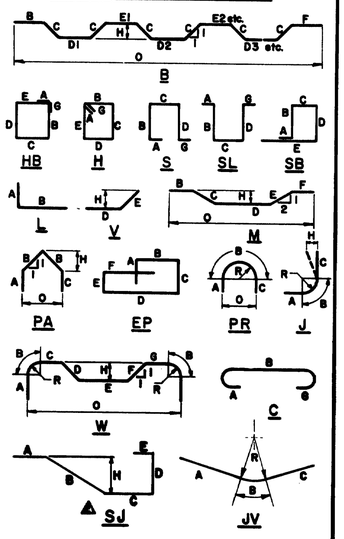
BENT BARS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
TOP SLAB														
TS301	438	2'-8"	HB	4"	6"	6"	6"	6"		4"				Ties in edges of slab
TS503	256	20'-0"	JV	11'-6"	1'-6"	7'-0"							6'-3"	Transv. Bott, G1 & C4
TS504	240	11'-6"	JV	5'-3"	1'-0"	5'-3"							3'-3"	d o, at G2 & G3
*TS507	286	3'-10"	L	10"	3'-0"	*Incidental to Pay item 526.32 (not included in item 503.14)								Dowels - Med. Barrier
TS5194	292	3'-0"	SB	10"	1'-4"	10"								Curb dowels
TS801	224	13'-0"	EP				5'-0"	1'-0"	7'-0"					Slab Cantilever at end beams (N&S ends)
CURB TRANSVERSE														
C401	292	4'-9"	EP		8"	1'-3"	1'-6"	4"	1'-0"					Transv. Rt. & Lt. Curbs
CONCRETE BARRIER														
*BR301	152	2'-6"	PR	1'-1"	4"	1'-1"							1½" (2¼" ID)	Transverse (incl. on abutments)

Note: *#5 Barrier dowels on abutments are listed with abutment bars.

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

TYPE-BENDING DIAGRAMS



All dimensions are out to out of reinf. bar
Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 318. ⚠
Reinforcing Bar: ASTM A615 Grade 60 Epoxy Coated

GENERAL NOTES

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.
   Mark (A502) bar size - #5
   Mark (P1001) bar size - #10
   Mark (S603) bar size - #6
2. Each truss bar, Type B, may be replaced by two (2) straight bars (one top & one bottom) of the same bar size as the truss bar. Payment in either case shall be based on truss bars as scheduled on plans.

102-178

REVISIONS	DATE
⚠ New Bent Bar Type SJ	9-26-83
⚠ Revised ACI Standard	5-12-83

DESIGN-DETAIL	CHECKED	REVISIONS	FIELD CHANGES
BY	MJB		
DATE	11-85		

PLANS

FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	44.1	515

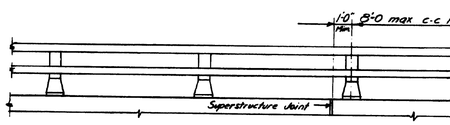
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 - PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVE.

REINFORCEMENT-TOP SLAB, CURB & CONCRETE BARRIER

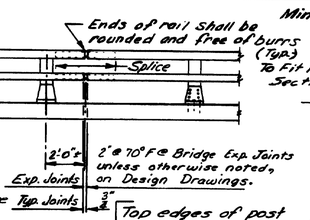
SHEET 37 OF 43 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	442	515

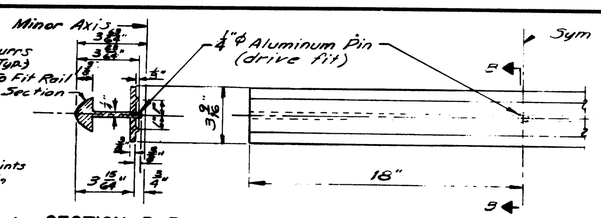


RAILING - ELEVATION

Lengths of rail shall be attached to a minimum of four (4) rail posts wherever possible, and in any case never less than two (2). Rail posts are to be set normal to grade unless otherwise shown on the Bridge Plans.



2" @ 70°F @ Bridge Exp. Joints unless otherwise noted, on Design Drawings.



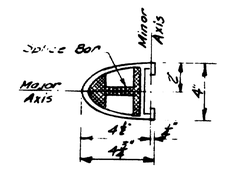
SECTION B-B

SPLICE BAR

Alternate splice bars may be substituted if approved by the Engineer.

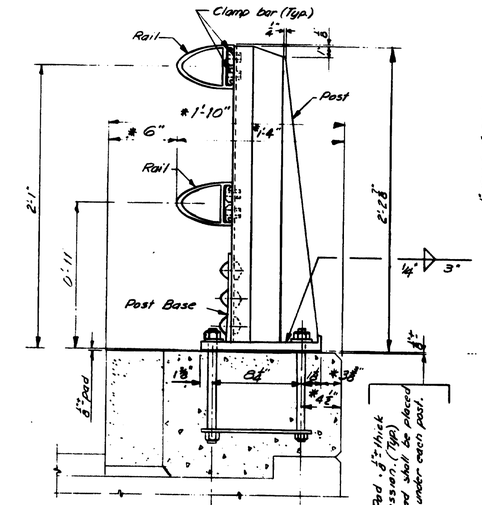
Sym about ℄ Splice

⚠3 If there is a conflict between this standard Detail and the Design Drawings, the requirements of the Design Drawings shall be followed.



RAIL SECTION

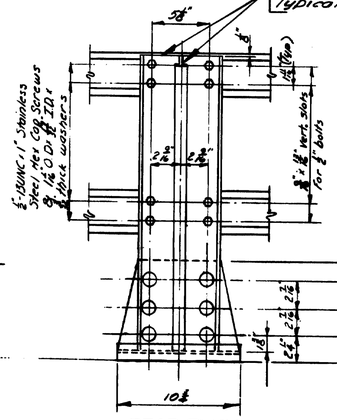
See "Rail Detail"



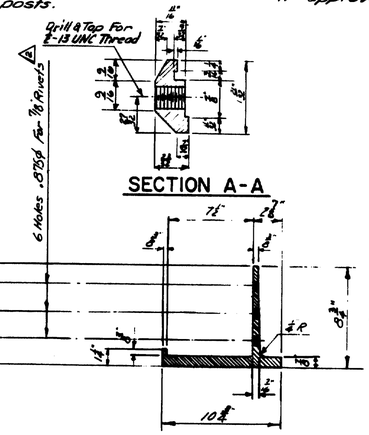
BRIDGE RAILING

(Assembly)

* Preferable minimum dimensions. For actual dimensions see Bridge Plan.

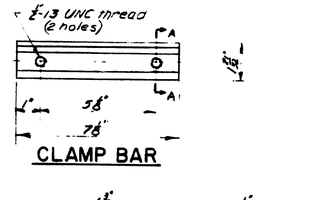


REAR ELEV.

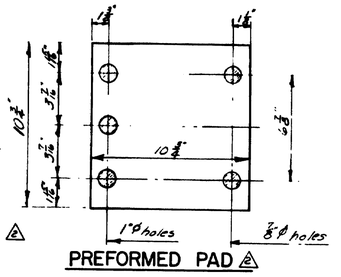


SECTION A-A

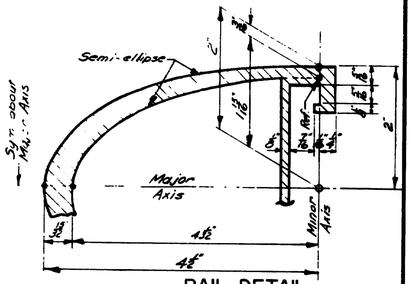
POST BASE SECTION ⚠2



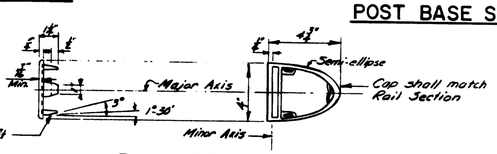
CLAMP BAR



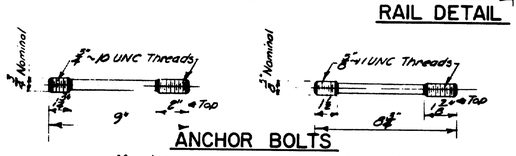
PREFORMED PAD ⚠2



RAIL DETAIL

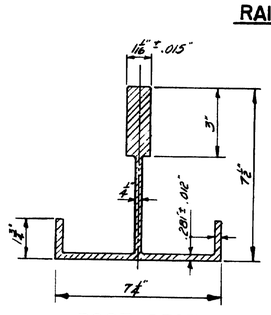


RAIL CAP

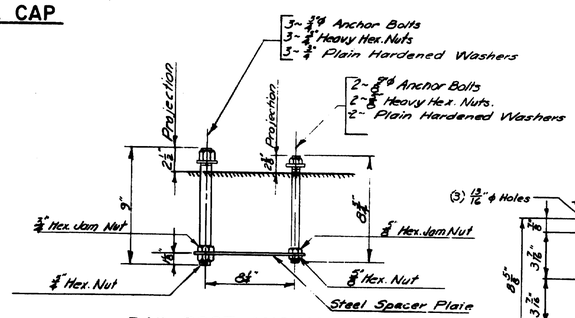


ANCHOR BOLTS

If cut threads are used, body diameter shall be not less than nominal diameter.
If rolled threads are used, body diameter shall be not less than pitch diameter of the threads.

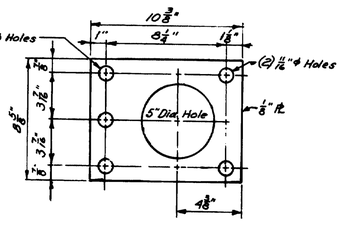


POST SECTION



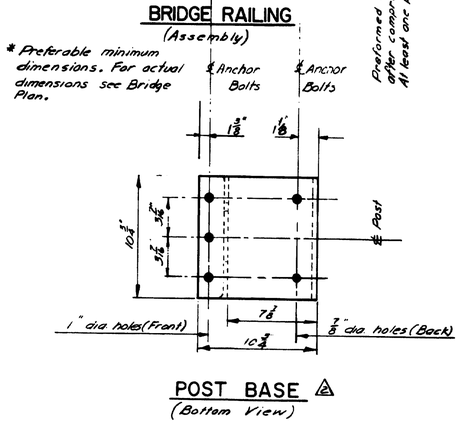
RAIL POST ANCHORAGE

(Assembly)



STEEL SPACER PLATE

(For Anchorage)



POST BASE ⚠2

(Bottom View)

PLANS	DESIGN - DETAILED	BY	DATE
	CHECKED	K. Leech	Jan. 1982
	REVISIONS		
	FIELD CHANGES		

102-179

⚠3	Added Note	12-84
⚠2	Revised Post Base	8-84
⚠1	Altered base dimensions	7-83
	REVISIONS	DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS

(BD 114 - 81)

ALUMINUM BRIDGE RAILING

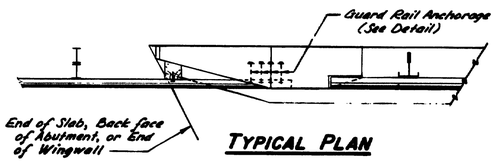
2 - BAR (SEMI-ELLIPSE)

SHEET 38 OF 43 AUGUSTA, MAINE JUNE 1981

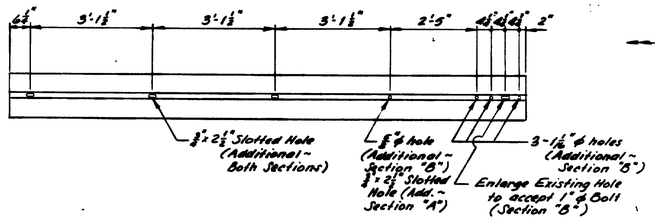
JANUARY 1982

5804 2000

FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(95)50	443	515

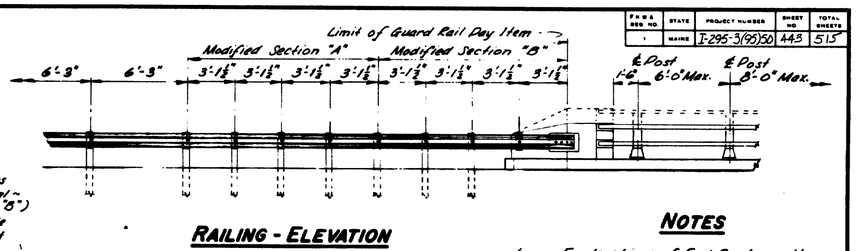


TYPICAL PLAN

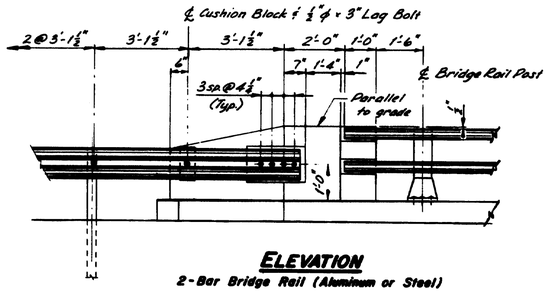


MODIFIED GUARD RAIL SECTIONS

(See Note #6)

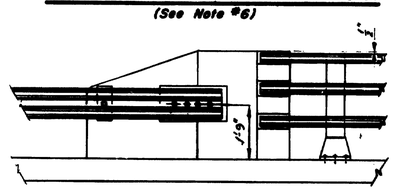


RAILING - ELEVATION



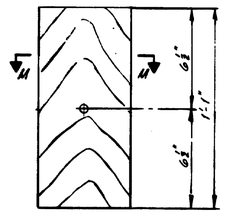
ELEVATION

2-Bar Bridge Rail (Aluminum or Steel)



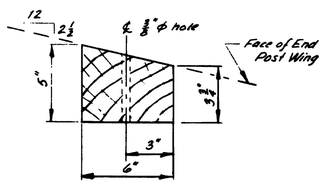
ELEVATION

3-Bar Bridge Rail (Aluminum or Steel)



CUSHION BLOCK

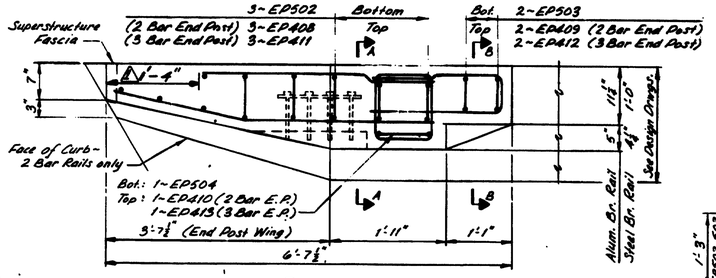
(See Note #7)



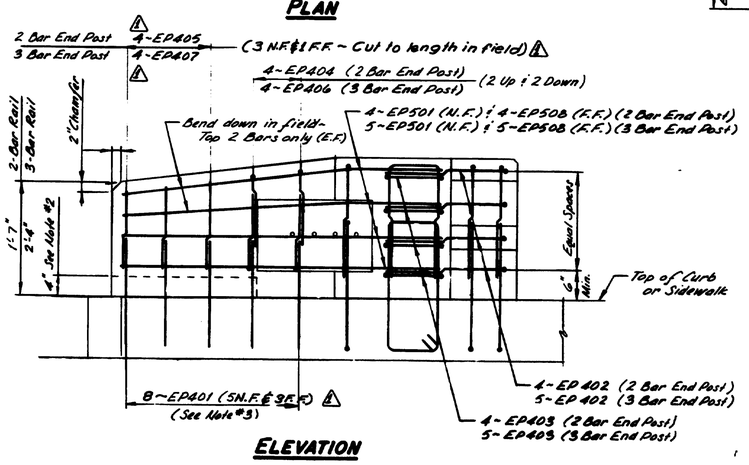
SECTION M-M

NOTES

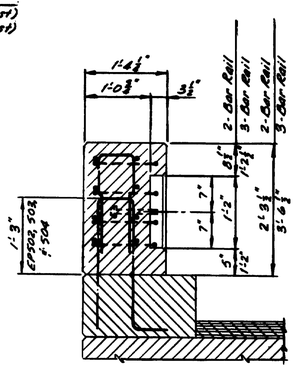
1. For locations of End Posts on the structure, see Design Drawings.
2. At times, an End Post Wing may be cantilevered for all or part of its length. For details, see Design Drwgs.
3. If an End Post Wing is cantilevered, bars EP401 to be omitted as needed.
4. When End Post Wing is cantilevered more than 2'-0", all #5 bars shall be replaced by #7 bars.
5. Nuts for ⅜"ϕ anchor bolts shall be incidental to Guard Rail Pay Items. Nuts shall conform to A.S.T.M. A563, Grade DH, galvanized in accordance with A.S.T.M. A153, or Grade C3, plain.
6. Additional holes in the Modified Guard Rail Sections may be made by drilling, punching, or any other method that produces a neat, clean hole of the required size. Burning of holes will not be allowed.
7. Cushion Block material shall be as specified for Wood Posts in Subsection 710.07 (a). Payment for Cushion Blocks and Lag Bolts shall be incidental to the Guard Rail Pay Items.
8. Reinforcing Steel shall have 2" min. concrete cover.
9. After installation of Guard Rail is complete, upset the thread on the anchor bolts in three places around each bolt, at the junction of the nut and the exposed thread, with a center punch or similar tool.
10. Guard Rail Anchorage shall be incidental to the applicable concrete pay item.
11. End Posts shall be constructed normal to grade unless otherwise shown on Design Drawings.
12. If there is a conflict between this Standard Detail and the Design Drawings, the requirements of the Design Drawings shall be followed.



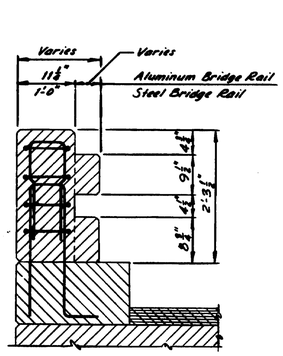
PLAN



ELEVATION

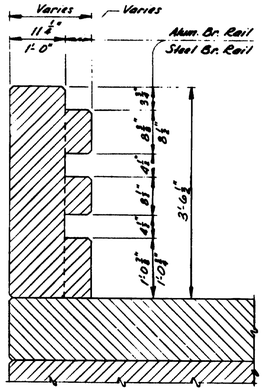


SECTION A-A



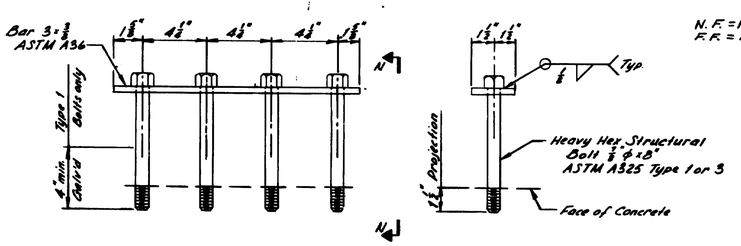
SECTION B-B

2-Bar Bridge Rail (Aluminum or Steel)



SECTION B-B

3-Bar Bridge Rail (Aluminum or Steel)



GUARD RAIL ANCHORAGE

VIEW N-N

LEGEND

N.F. = Near Face E.F. = Each Face
F.F. = Far Face

REVISIONS	DATE
1 General Revisions	1-83
2 Added Note # 12.	1-85

102-180

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

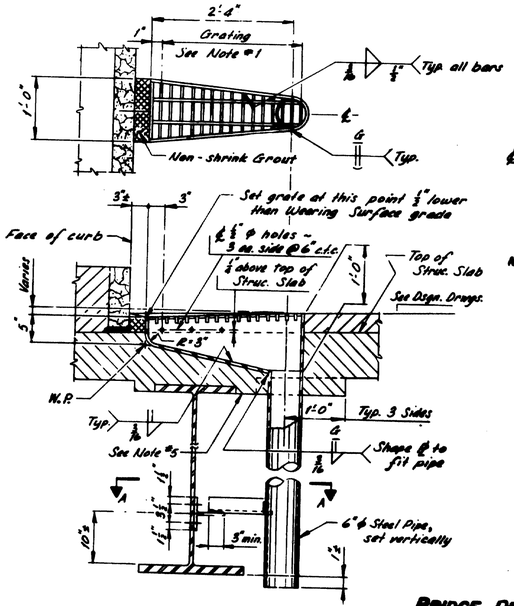
STANDARD DETAILS
(BD 120-81)

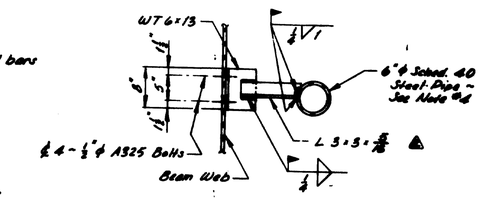
CONCRETE END POSTS

SHEET 39 OF 43 AUGUSTA, MAINE JUNE 1981

PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	D. Dennis	Nov '81
	CHECKED		
	REVISIONS		
	FIELD CHANGES		

DRAWING 44-132-45710



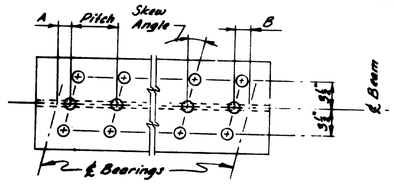


SECTION A-A

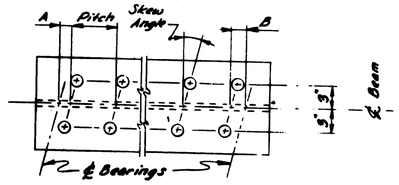
NOTES:

1. Grating shall be a commercial heavy-duty grating with 1⅛" x ⅜" bearing bars spaced at 2⅛" c.t.c., and ⅜" ϕ cross bars spaced at 4" c.t.c.
2. Plates shall be A.S.T.M. A36, ½" thick.
3. WT 6 x 13 shall be of the same material as the beam web.
4. At the option of the Contractor, the Bridge Drain may be modified to allow the use of 7.5 6" x 6" x ½" conforming to A.S.T.M. A501 or A.S.T.M. A500, Gr. "A", in place of the 6" ϕ steel pipe.
5. If the minimum thickness of concrete below the Drain is 2" or less, the haunch shall be extended as shown.
6. Painting will not be required when the structural steel is specified to be unpainted.
7. Payment for Bridge Drain shall be as specified under subsection 502.19 of the Standard Specifications.

BRIDGE DRAIN



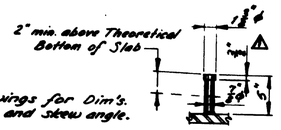
TRIPLE STUDS



DOUBLE STUDS

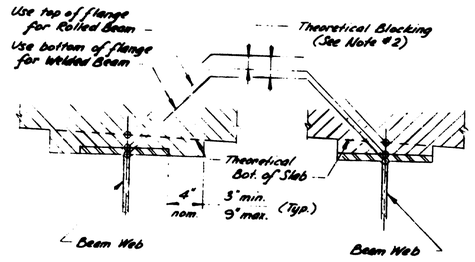
NOTE:

1. See Design Drawings for Dim's. "A" & "B", stud pitch, and skew angle.



SHEAR CONNECTORS **STUD DETAIL**

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295(95)50	444	515

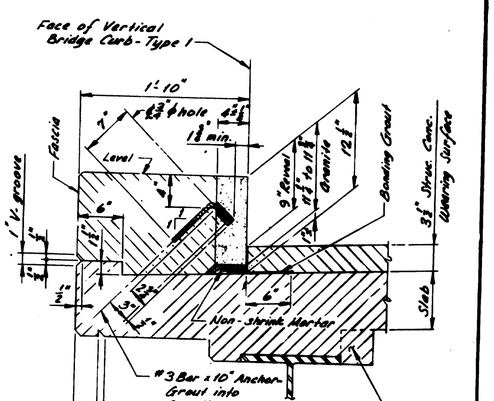


OPTION "A" **OPTION "B"**

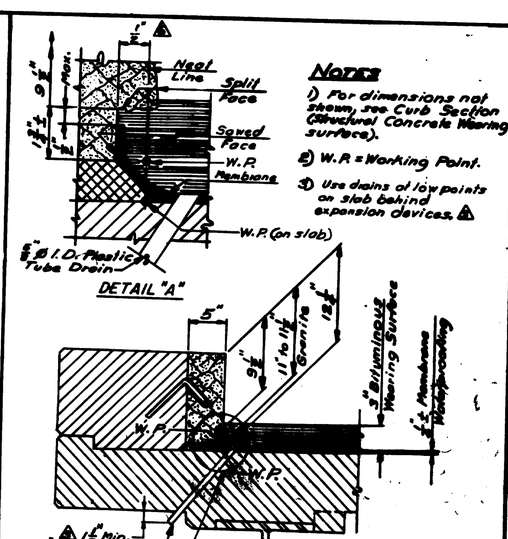
NOTE:

1. Haunch Option "A" or Option "B" may be used at the Contractor's discretion. Only one option shall be used on each structure, except that Option "A" must always be used on the fascia side of all fascia beams and on beams designed without shear connectors.
2. Theoretical Blocking shall be as indicated on Design Drawings.
3. Do not use Theoretical Blocking for setting of formwork.

HAUNCH DETAILS



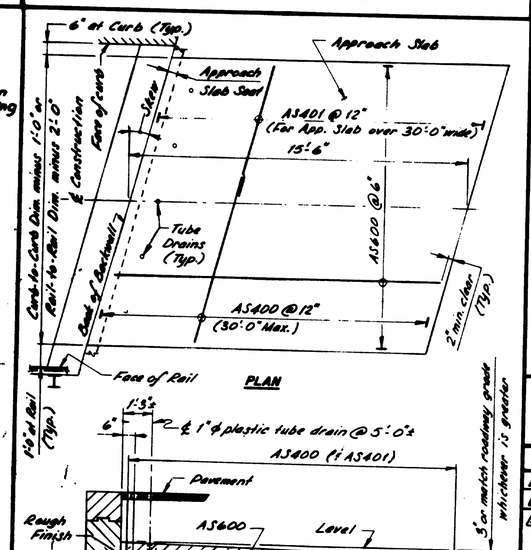
CURB SECTION TYPE 1A ▲▲
(STRUCTURAL CONCRETE WEARING SURFACE)



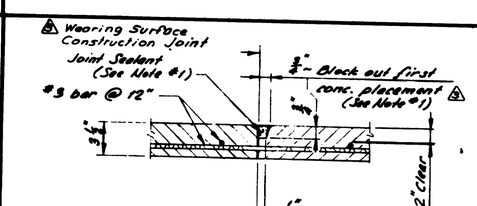
Notes

1) For dimensions not shown, see Curb Section (Structural Concrete Wearing surface).
2) W.P. = Working Point.
3) Use drains at low points on slab behind expansion devices. ▲

CURB SECTION TYPE 1B ▲▲▲
(BITUMINOUS WEARING SURFACE)



APPROACH SLAB



STRUCTURAL CONCRETE WEARING SURFACE ▲

NOTE:

▲ 1. Use Block-out and Sealant only at Wearing Surface Construction Joints over Structural Slab Construction Joints. At all other joints, brush joint with neat cement paste before making adjacent concrete placement.

102-181

NOTE: ▲ If there is a conflict between this Standard Detail and the Design Drawings, the requirements of the Design Drawings shall be followed.

PROJECT DESIGN ENGINEER	BY	DATE
PLANS	DESIGN - DETAILED	D. Dyson Jan. '82
	CHECKED	
	REVISIONS	
	FIELD CHANGES	

BRUNING 44-132-4710

REVISIONS		DATE
▲	Revised Stud Detail	3-82
▲	Added Curb Section	7-82
▲	Added Plastic Tube Drain & modified Structural Concrete Wearing Surface.	11-82
▲	Revise Curb Anchors	2-83
▲	Revise Curb Title	6-83
▲	Revise Curb Type 1B	11-83
▲	Added Note	1-85

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

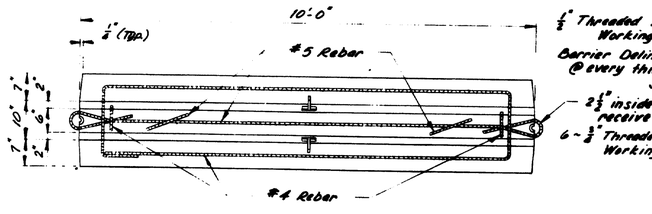
STANDARD DETAILS
(BD 126-81)

MISCELLANEOUS DETAILS

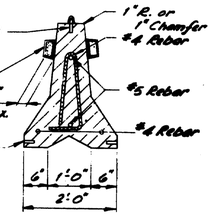
BRIDGE DRAIN - SHEAR CONNECTORS
STRUC. CONC. WEAR. SURFACE
CURB SECTION - APPROACH SLAB
HAUNCH DETAILS

SHEET 40 OF 43 AUGUSTA, MAINE JUNE 1981

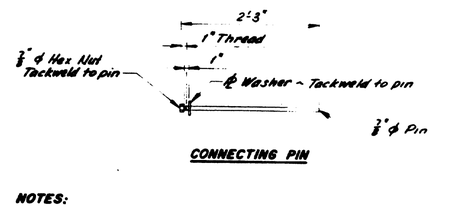
F.A.P. or S.P.R. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
	MAINE	I-395-3(95)50	445	515



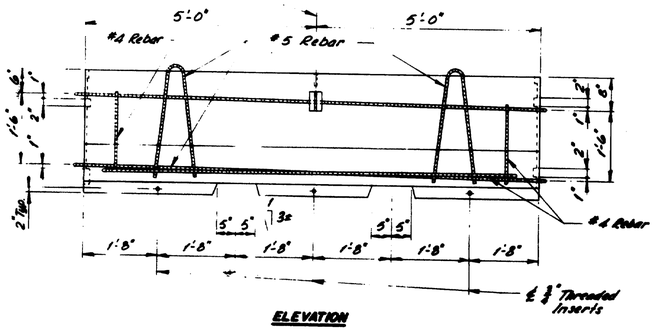
PLAN



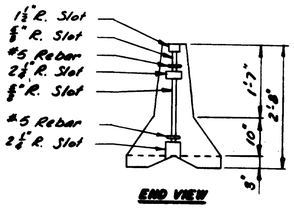
TYPICAL SECTION



CONNECTING PIN



ELEVATION

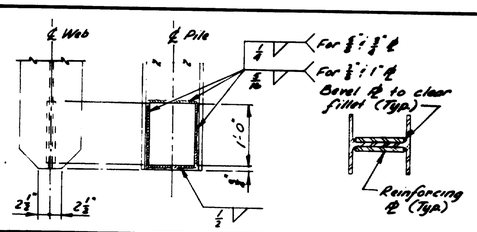


END VIEW

NOTES:

1. The reinforcing steel, and connections, lifting arrangement, and sizes and locations of hold-down inserts are advisory only. It shall be the Contractor's responsibility to provide adequate reinforcing, and connections, lifting points, and hold-down arrangements.
2. Barrier Delineators shall be bi-directional with a minimum effective reflex area of 8.0 square inches as approved by the Engineer. The Reflector shall preferably be of Methyl Methacrylate, and the Housing of Acrylonitrile Butadiene Styrene.

TEMPORARY CONCRETE BARRIER - TYPE 1

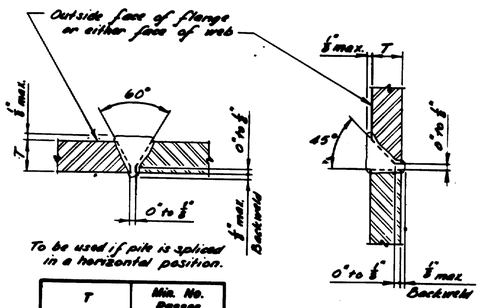


Pile Size	Reinf. ℄ Size	Pile Size	Reinf. ℄ Size
HP 10x42	8⅜" x ⅝" x 1'-0"	HP 13x60 ⚠3	11½" x ¾" x 1'-0"
HP 10x57	8⅜" x ⅞" x 1'-0"	HP 13x73 ⚠3	11½" x ⅞" x 1'-0"
HP 12x53	10¾" x ⅝" x 1'-0"	HP 13x87 ⚠3	11½" x 1" x 1'-0"
HP 12x63	10¾" x ¾" x 1'-0"	HP 14x73	12½" x ⅞" x 1'-0"
HP 12x74	10¾" x ⅞" x 1'-0"	HP 14x89	12½" x 1" x 1'-0"

NOTES:

⚠3 1. At the Contractor's option, prefabricated cast steel pointed pile tips may be used in lieu of the reinforced pile tip shown, provided they have a cross-sectional area of 1½ times the area of the pile at a point ⅜ inches above the bottom of the prefabricated tip, and are approved by the Engineer.
2. Plates may be shop or field welded.
3. Use Manual Shielded-Arc Process and 6010, 6011, or 6012 electrodes, unless a different process has been approved by the Engineer.
4. Electrodes shall be dry when used, in accordance with the provisions of A.W.S. Spec. D1.1, as amended by AASHTO.

POINTED REINFORCED PILE TIP



To be used if pile is spliced in a horizontal position.

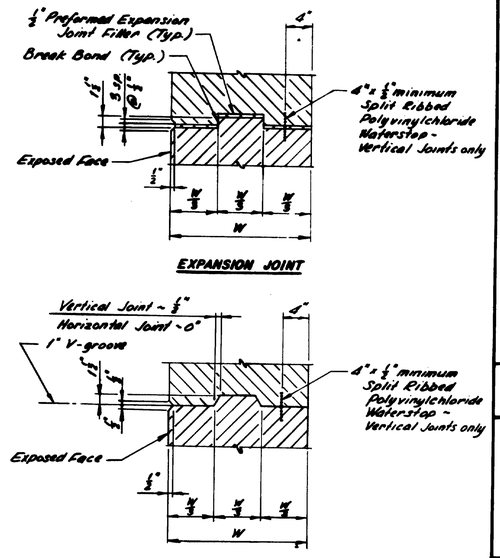
T	Min. No. Passes
½	3
⅝, ¾, ⅞	4
1, 1⅛	5

To be used if pile is spliced in a vertical position.

NOTES:

1. All cutting shall be done with the use of a mechanical guide.
2. Use Manual Shielded Metal-Arc Process and 6010, 6011, or 6012 electrodes, unless a different process has been approved by the Engineer.
3. Electrodes shall be dry when used, in accordance with the provisions of A.W.S. Spec. D1.1, as amended by AASHTO.
4. Gouge root before welding second side.

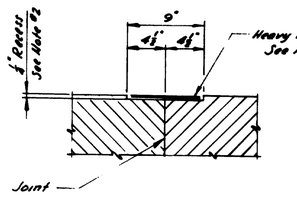
PILE SPLICE



EXPANSION JOINT

CONSTRUCTION OR CONTRACTION JOINTS

CONCRETE JOINTS



CONCRETE JOINT COVER

NOTES:

1. Where called for, cover horizontal and vertical construction, contraction, or expansion joints with two (2) 9" wide layers of heavy roofing felt. Coat the concrete and back of each layer as applied with plastic roofing cement.
2. Recess the covered area ½" unless otherwise indicated on Design Drawings.

NOTE: ⚠2 If there is a conflict between this Standard Detail and the Design Drawings, the requirements of the Design Drawings shall be followed.

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

DRAWING 44.132 (2/10)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS
(BD 127-81)

MISCELLANEOUS DETAILS

TEMP. CONC. BARRIER - TYPE 1
POINTED REINF. PILE TIP
PILE SPLICE - CONC. JOINTS
CONCRETE JOINT COVER

102-182

REVISIONS	Date
⚠3 Revd Pile Tip Note 1	1-86
⚠2 ADDED NOTE	1-85
⚠1 Added 13 HP's	7-83

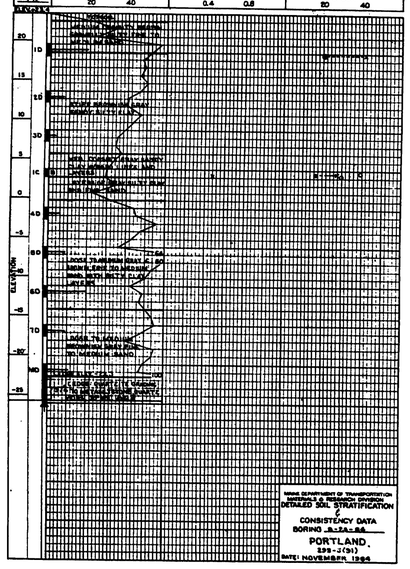
SHEET 41 OF 43 AUGUSTA, MAINE JUNE 1981

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(95)50	447	615

BORING B-24-84 STATION

CASING SIZE 3.5"	DRIVING RESISTANCE Blows/Ft. 20 40	VANE SHEAR STRENGTH Tons/Sq.Ft. 0.4 0.8	WATER CONTENT Percent 20 40

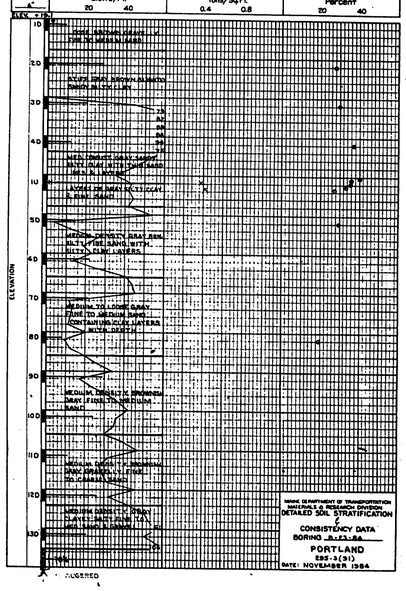
ELEV. +32.0



BORING B-23-84 STATION

CASING SIZE 4"	DRIVING RESISTANCE Blows/Ft. 20 40	VANE SHEAR STRENGTH Tons/Sq.Ft. 0.4 0.8	WATER CONTENT Percent 20 40

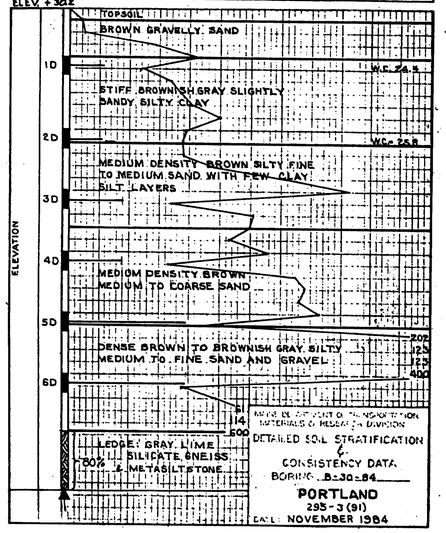
ELEV. +18.0



BORING B-30-84 STATION

CASING SIZE 2 1/2	DRIVING RESISTANCE — Blows/Ft. 20 40 60 80 100

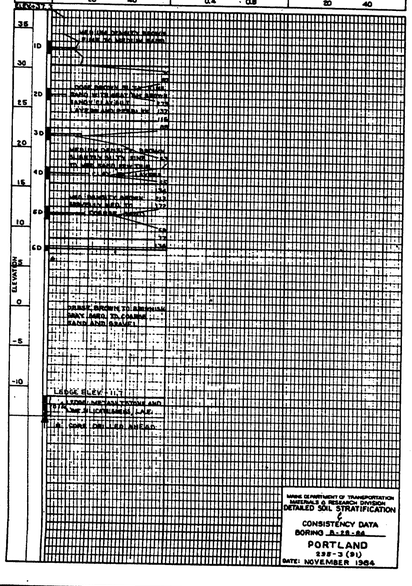
ELEV. +30.2



BORING B-28-84 STATION

CASING SIZE 3.5"	DRIVING RESISTANCE Blows/Ft. 20 40	VANE SHEAR STRENGTH Tons/Sq.Ft. 0.4 0.8	WATER CONTENT Percent 20 40

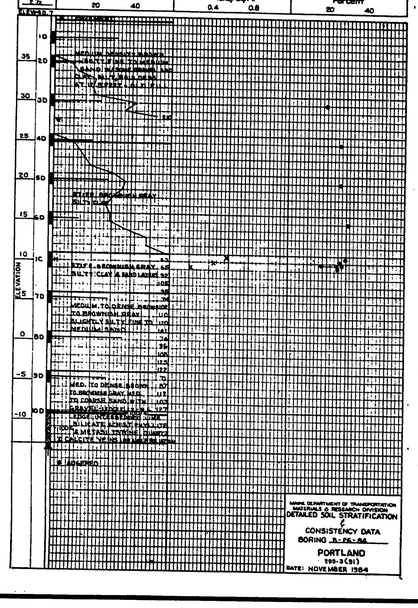
ELEV. +34.0



BORING B-26-84 STATION

CASING SIZE 4"	DRIVING RESISTANCE Blows/Ft. 20 40	VANE SHEAR STRENGTH Tons/Sq.Ft. 0.4 0.8	WATER CONTENT Percent 20 40

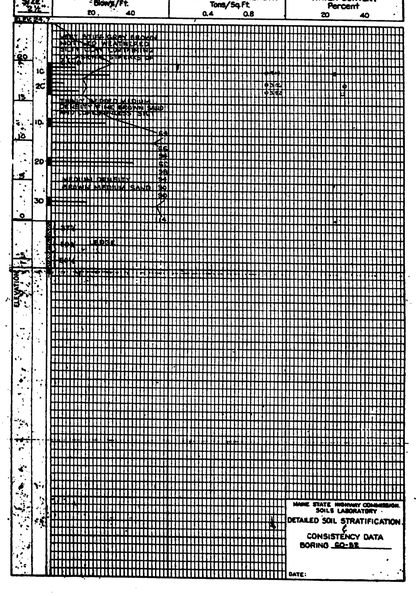
ELEV. +35.0



BORING 60-52 STATION

CASING SIZE 2 1/2" 3 1/4"	DRIVING RESISTANCE Blows/Ft. 20 40	VANE SHEAR STRENGTH Tons/Sq.Ft. 0.4 0.8	WATER CONTENT Percent 20 40

ELEV. +35.5



NOTES

1. SEE SHEET NO. 446 FOR EXPLORATION LOCATIONS GENERALIZED SOIL PROFILES, AND REFERENCE NOTES.

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

BRUNING 44-132 40710 I

102-183

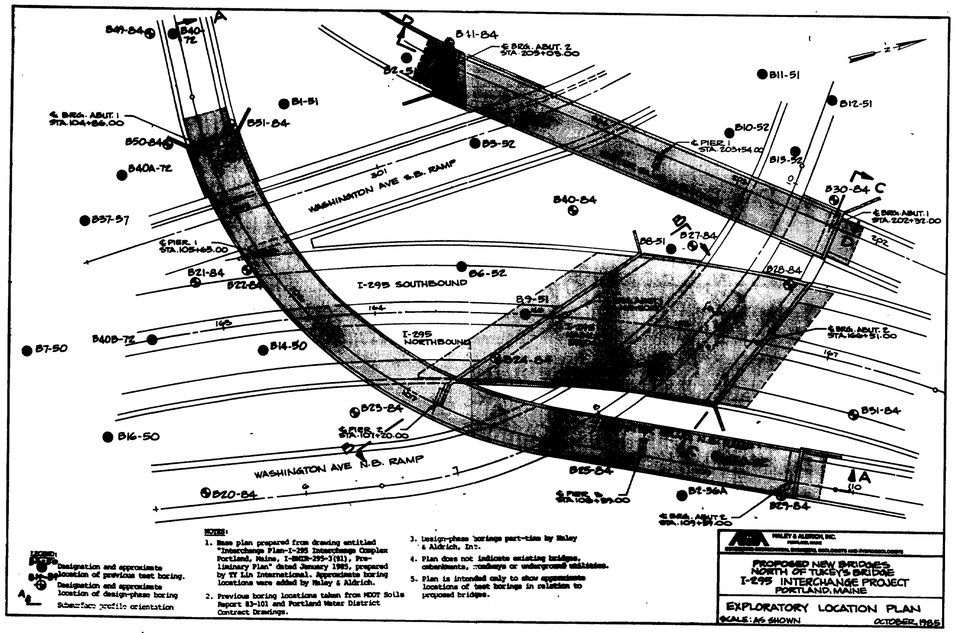
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

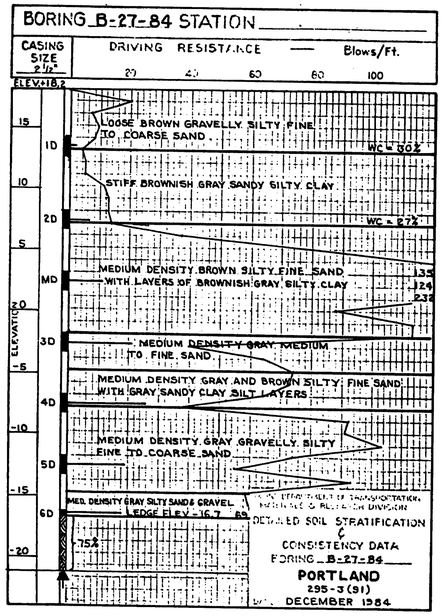
I-295 PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVENUE

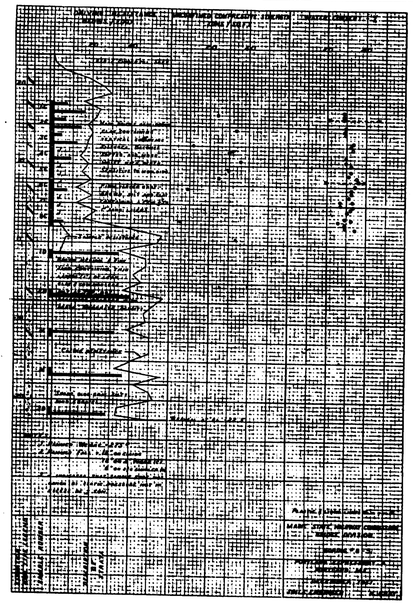
SUBSURFACE SOILS DATA

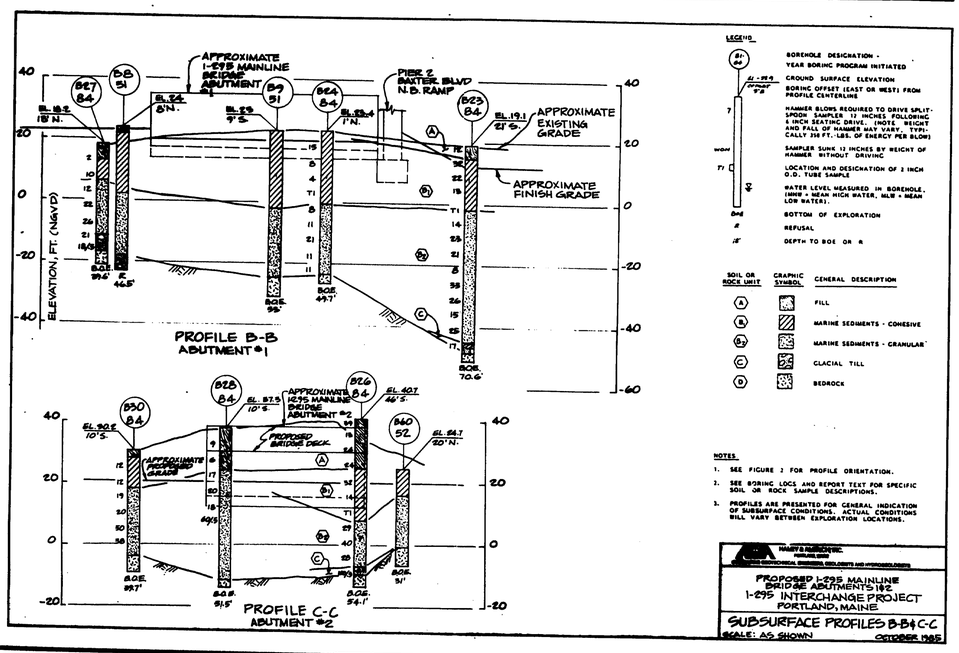
SHEET 43 OF 43 AUGUSTA, MAINE

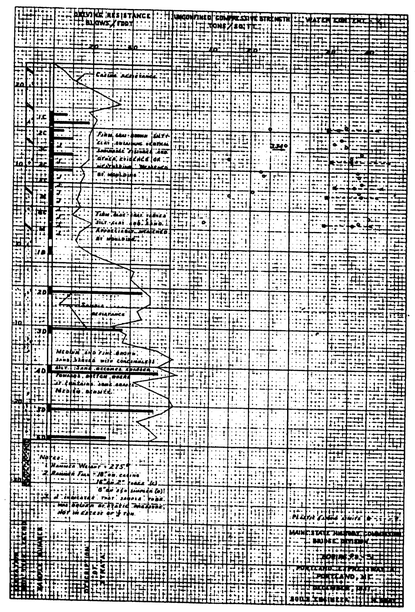
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	I-295-3(95)50	446	615











NOTES

1. BORING LOCATION PLAN AND SOIL-PROFILES WERE TAKEN FROM "REPORT ON PROPOSED BAXTER BOULEVARD NORTHBOUND RAMP, I-295 MAINLINE BRIDGE AND BAXTER BOULEVARD SOUTHBOUND RAMP, I-295 INTERCHANGE PROJECT PORTLAND, MAINE" PREPARED BY HALEY & ALDRICH, INC. AND DATED 3 OCTOBER 1985.
2. REFER TO THE ABOVE REFERENCED GEOTECHNICAL REPORT FOR DISCUSSION OF SUBSURFACE CONDITIONS AND FOUNDATION CONSTRUCTION CONSIDERATIONS.
3. TEST BORING LOGS PREPARED BY MATERIAL & RESEARCH DIVISION, MAINE DEPARTMENT OF TRANSPORTATION.
4. BORINGS DRILLED PRIOR TO 1986 REPRESENT GROUND SURFACE ELEVATIONS AND SUBSURFACE STRATIFICATIONS WHICH EXISTED AT THE TIME OF DRILLING.

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

BRUNING 44-132-45710-1

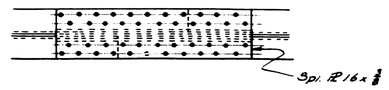
102-184

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

I-295 PORTLAND
CUMBERLAND COUNTY
I-295 OVER WASHINGTON AVENUE

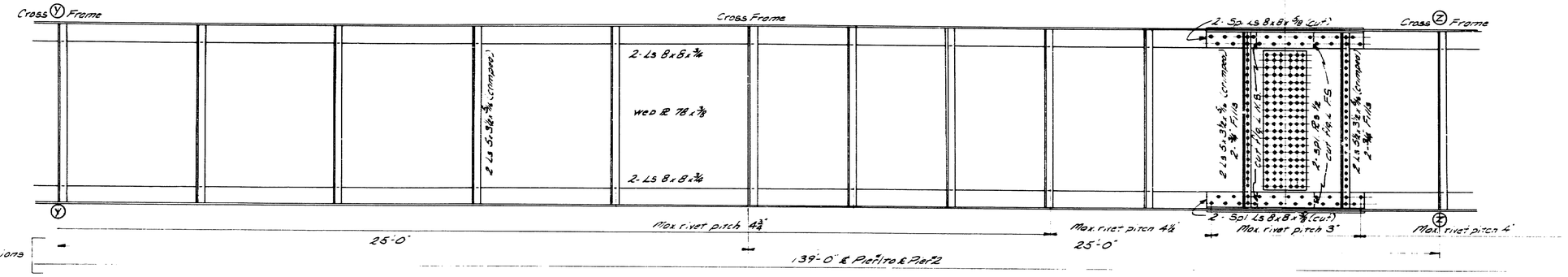
SUBSURFACE SOILS DATA

SHEET 42 OF 43 - AUGUSTA, MAINE

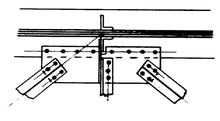


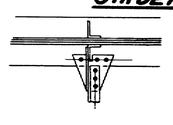
25'-1½" ± to ℄ Pier #2

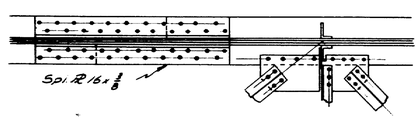
℄ Field Splice

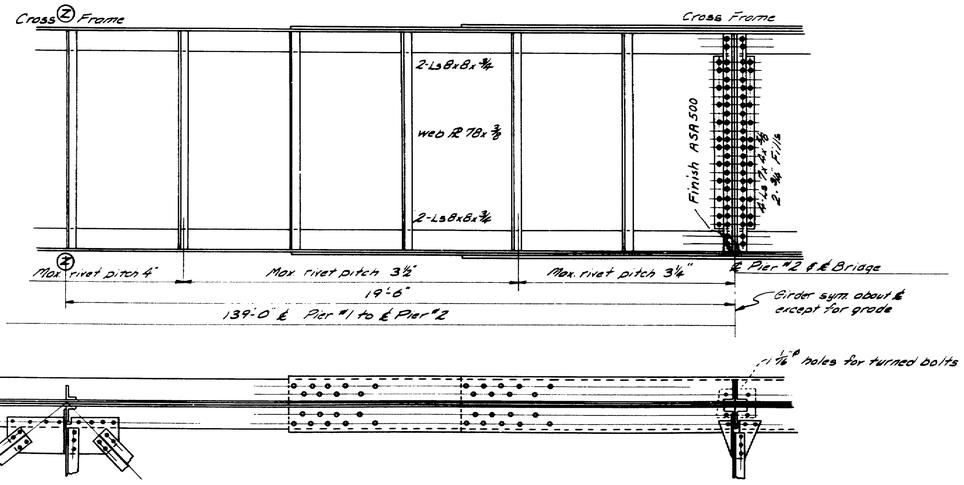


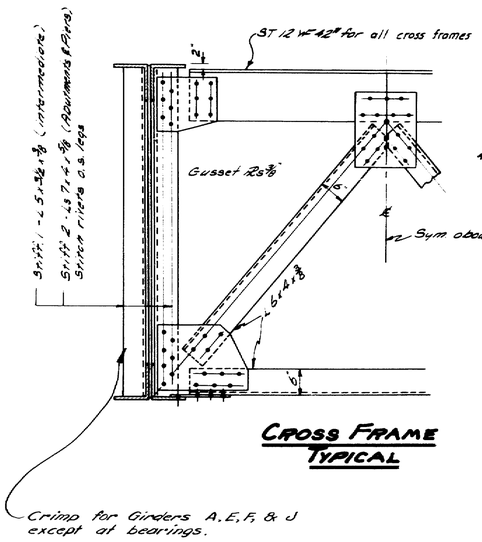
GIRDER A (continued)





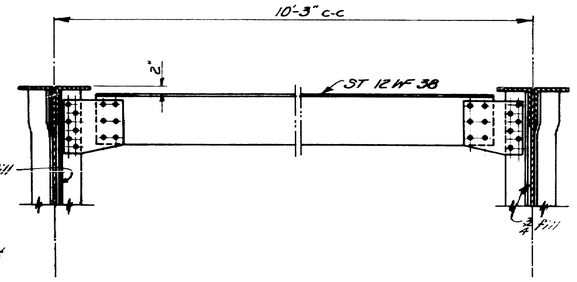






CROSS FRAME TYPICAL

Crimp for Girders A, E, F, & J except at bearings.



INTERMEDIATE STRUTS

Between Girders "D" & "E" only

Typical

Locate intermediate struts at stiffeners nearest to midpoint between cross frames.

DESIGN — RISSEL DETAIL — WHITE TRACE — BACHELDER	CHECK — E. BRIDGE —

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEY'S BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

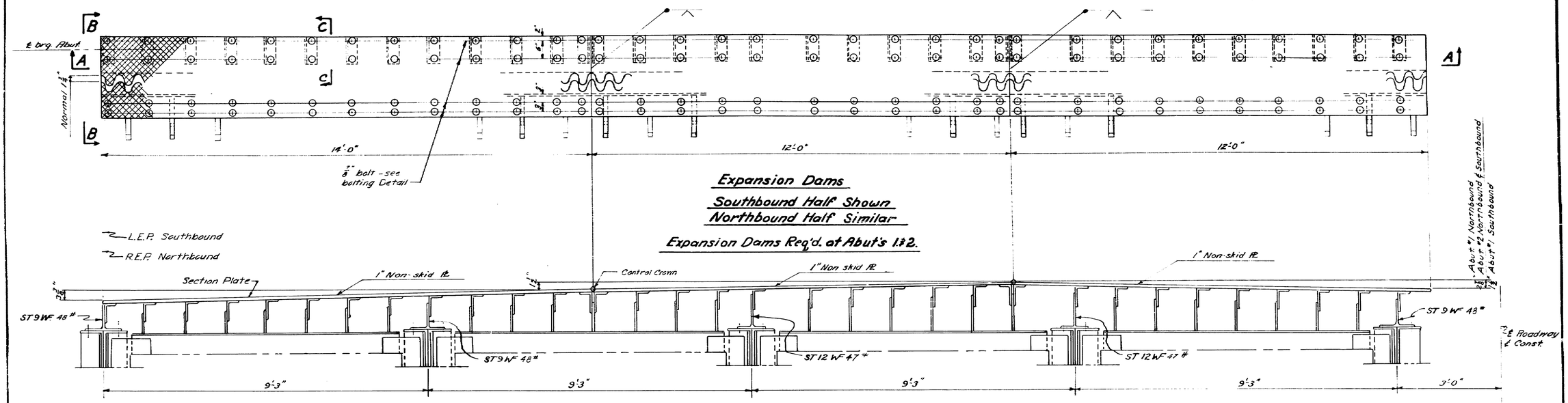
TUKEYS BRIDGE
STEEL DETAILS

SHEET 79 OF 166 AUGUSTA, MAINE OCT. 1957

76-79

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NUMBER
1	MAINE	F 020-1(14)

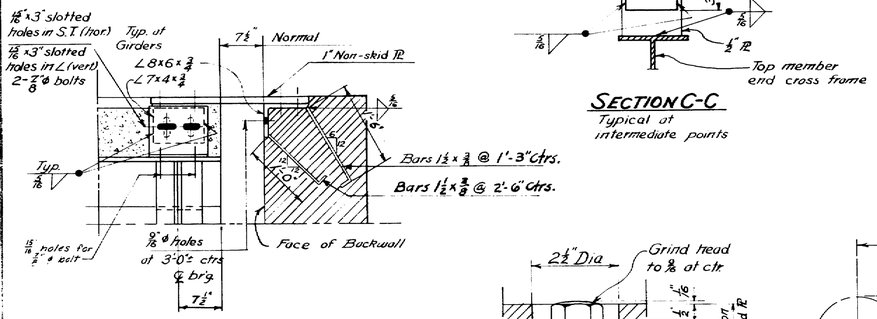


Expansion Dams
Southbound Half Shown
Northbound Half Similar

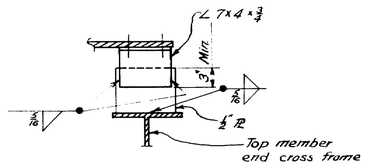
Expansion Dams Req'd. at Abut's 1 & 2.

Note: At R.E.P. Northbound ST 9 WF 48# to rest on top member of cross frame.

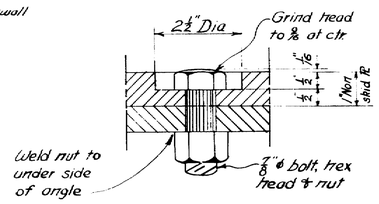
Section A-A.



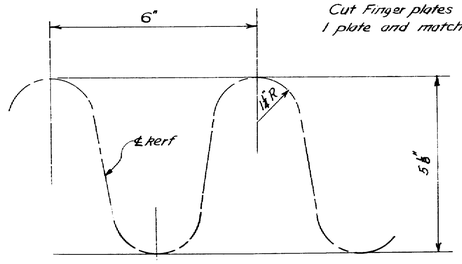
VIEW B-B



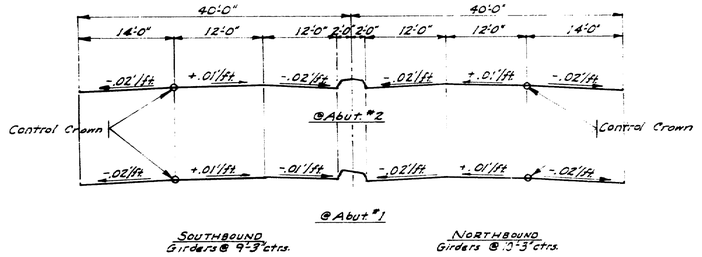
SECTION C-C
Typical at intermediate points



BOLTING DETAIL
For 1" Non-skid Pf's



FINGER CUTTING DETAIL



GENERAL TRANSVERSE SECTIONS

DESIGN - RISSEL Detail Letter
TRACE - WELCH
CHECK - JR
BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

TUKEYS BRIDGE
EXPANSION DAMS

SHEET 80 OF 166 AUGUSTA, MAINE OCT. 1957

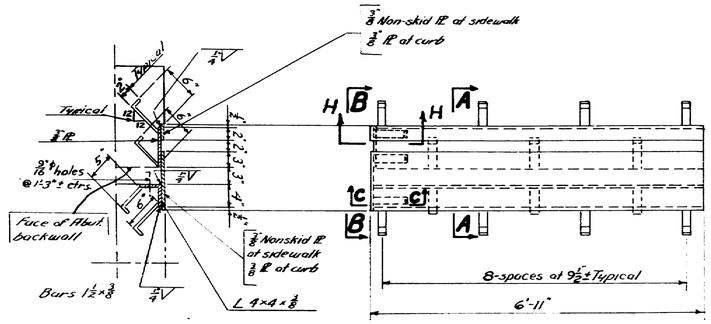
76-80

0 1 2 3 4 5 INCHES

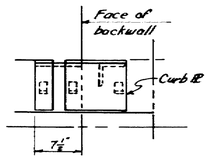
S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	[illegible]	81	166

1 PDF - RES. 50

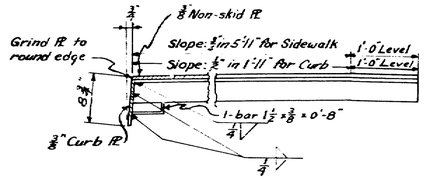
Section A-A



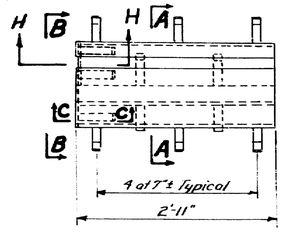
Expansion Dam Sidewalk



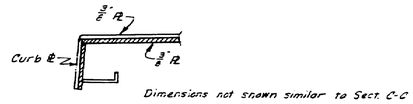
View B-B



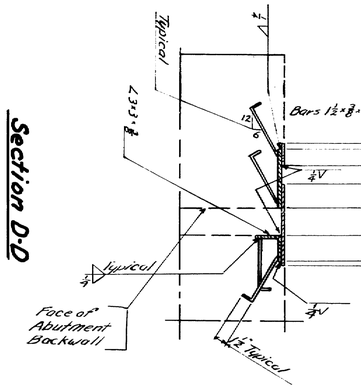
Section C-C

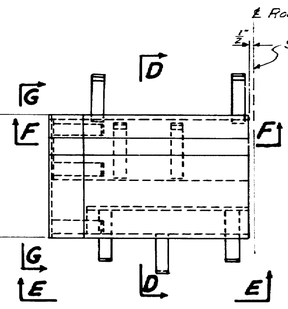


Curb Expansion Dam

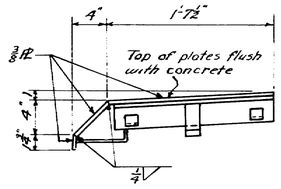


Section H-H



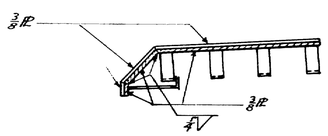


Expansion Dam Median



View E-E

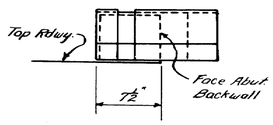
Abut. #1 Northbound
Abut. #2 Northbound & Southbound



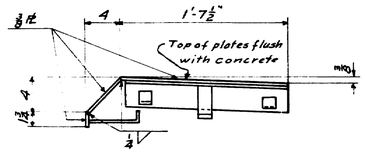
Section F-F

Abut. #1 Northbound
Abut. #2 Northbound & Southbound

Note: Expansion Dams required at Abuts. 1 & 2.

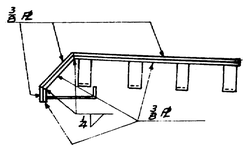


View G-G



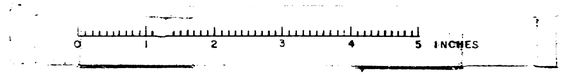
View E-E

Abut. #1 Southbound



Section F-F

Abut. #1 Southbound



DESIGN - RISSEL
TRACE - WELCH
CHECK - [illegible]

BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

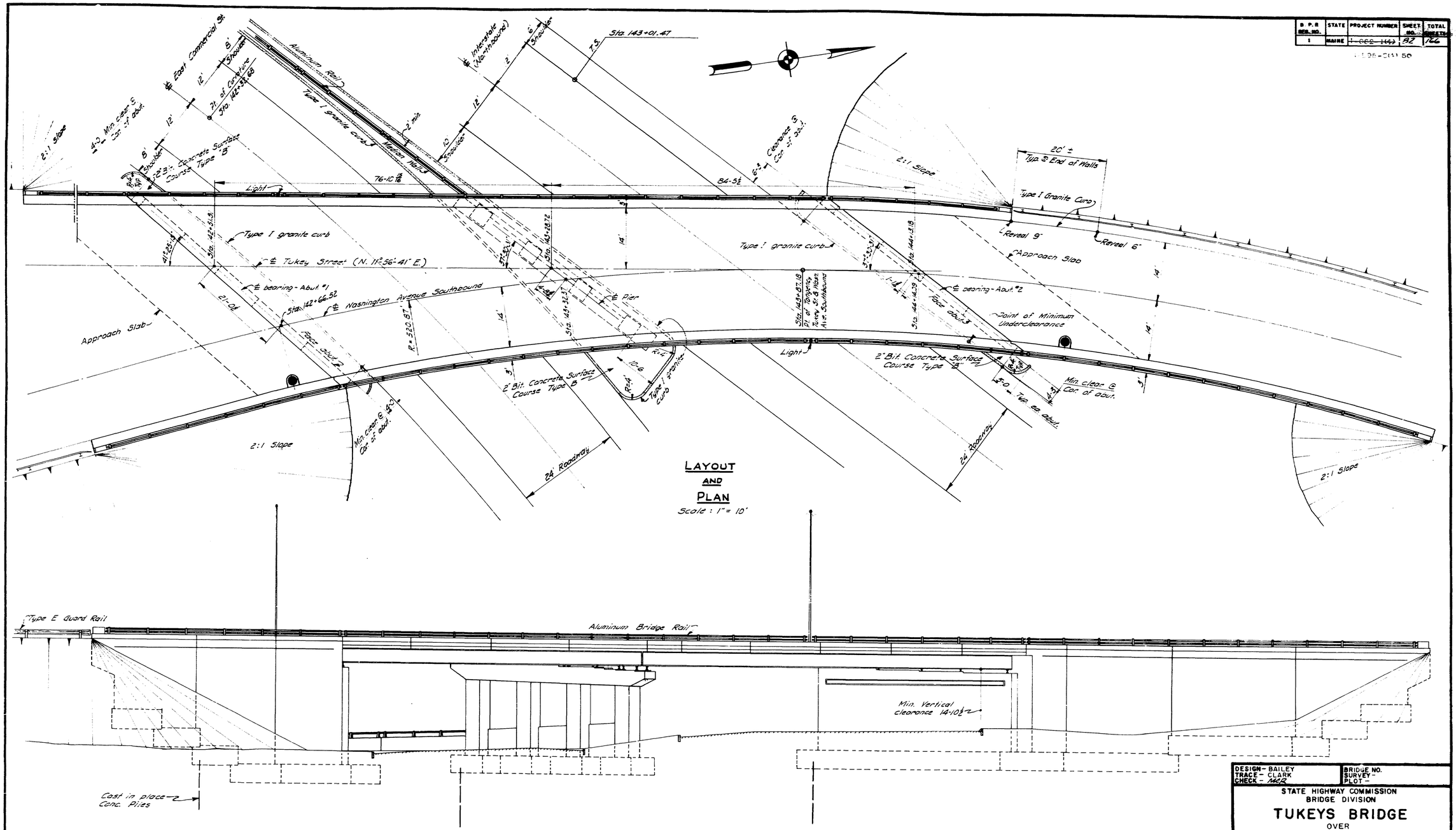
TUKEYS BRIDGE
EXPANSION DAMS

SHEET 81 OF 166 AUGUSTA, MAINE OCT. 1957

76-81

B.P.R. SER. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~1-066-1(43)~~	82	166

1-35-C(11) 50



LAYOUT AND PLAN

Scale : 1" = 10'

ELEVATION

Scale: 1" = 10'

DESIGN - BAILEY TRACE - CLARK CHECK - [illegible]	BRIDGE NO. SURVEY - PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

OVERPASS NO. 1
PLAN, ELEVATION & LAYOUT

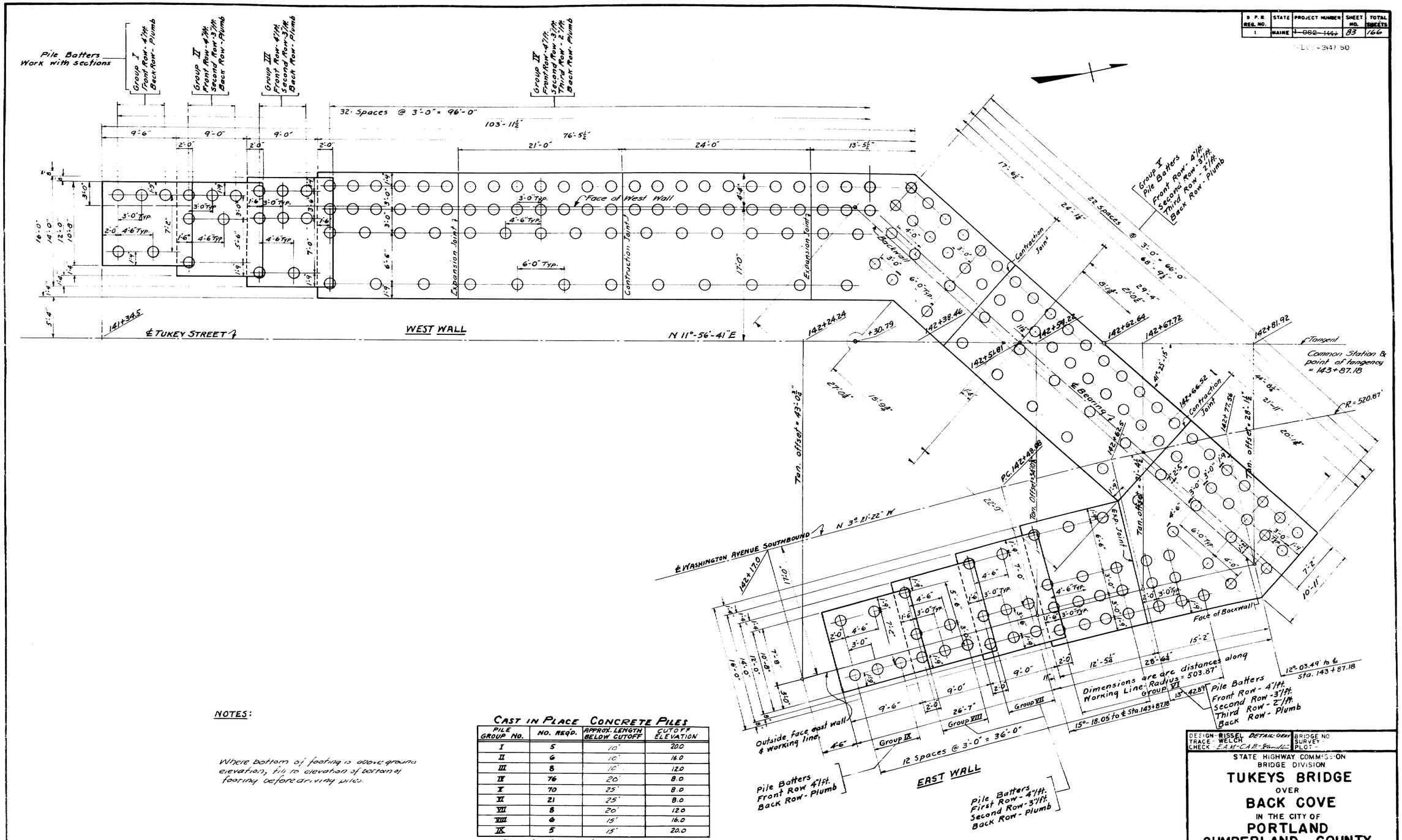
SHEET 82 OF 166 AUGUSTA, MAINE OCT. 1957

76-82

0 1 2 3 4 5 INCHES

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~S 082 1(4)~~	83	166

SEE S-343 50



NOTES:

Where bottom of footing is above ground elevation, fill to elevation of bottom of footing before driving piles.

CAST IN PLACE CONCRETE PILES

PILE GROUP NO.	NO. REQ'D.	APPROX. LENGTH BELOW CUTOFF	CUTOFF ELEVATION
I	5	10'	20.0
II	6	10'	16.0
III	8	10'	12.0
IV	76	20'	8.0
V	70	25'	8.0
VI	21	25'	8.0
VII	8	20'	12.0
VIII	6	15'	16.0
IX	5	15'	20.0

Max. load per pile = 31 tons

DESIGN - RISSEL DETAIL - GRAY
TRACE - WELCH
CHECK - E.A.M.-C.A.B.-Sandler

BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

OVERPASS NO. 1 - ABUT. NO. 1 & RETAINING WALLS
FOUNDATION & PILE PLAN

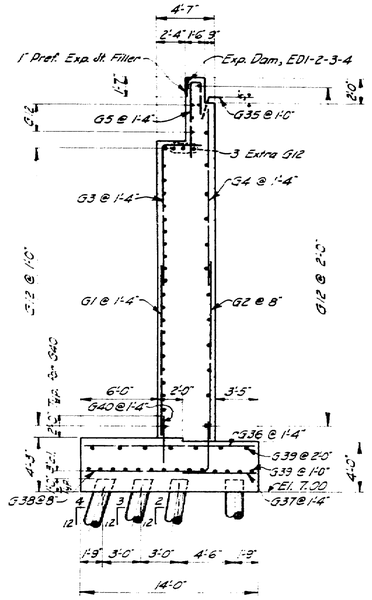
SHEET 83 OF 166 AUGUSTA, MAINE OCT. 1957

76-83

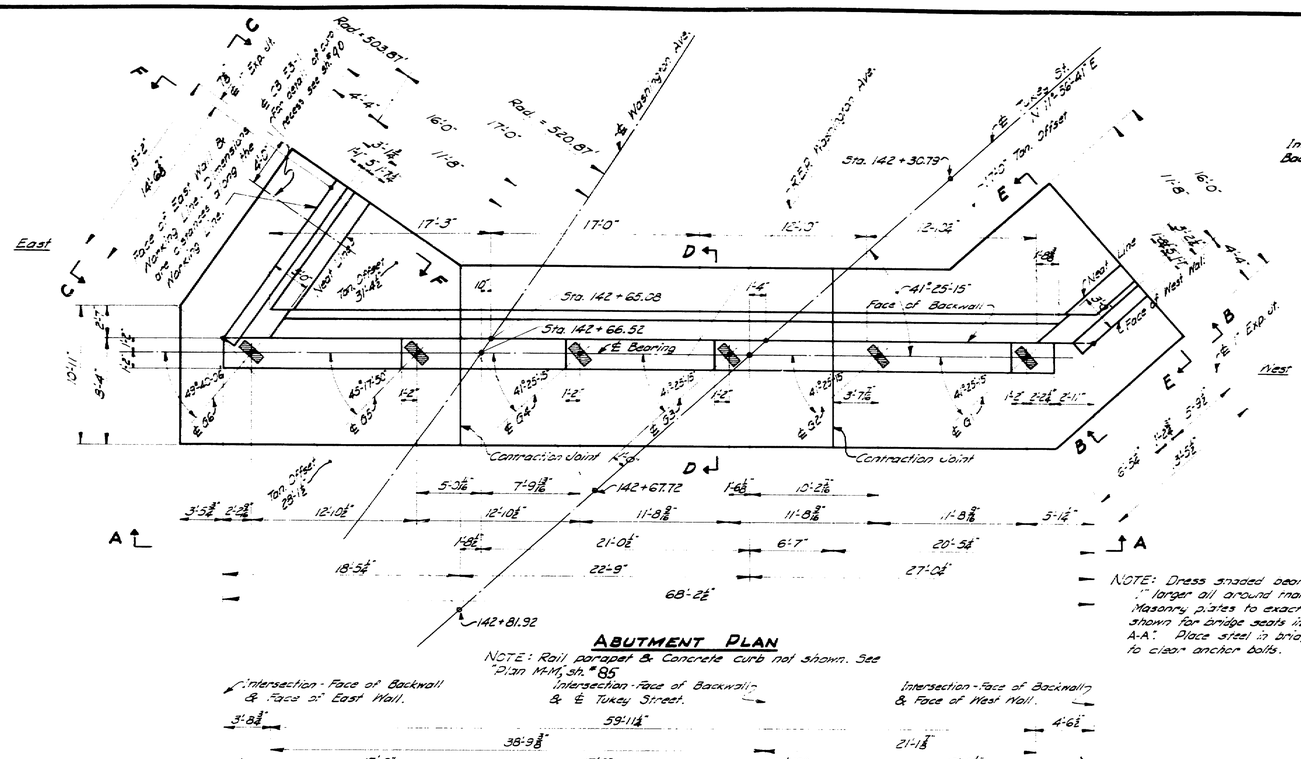
0 1 2 3 4 5 INCHES

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~1-BRS-(44)~~	84	166

1-BRS-(84) 50



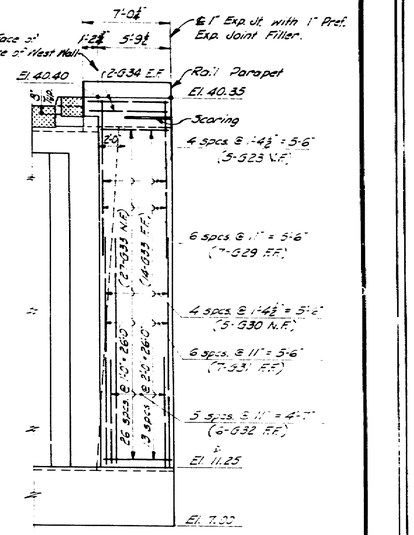
SECTION D-D



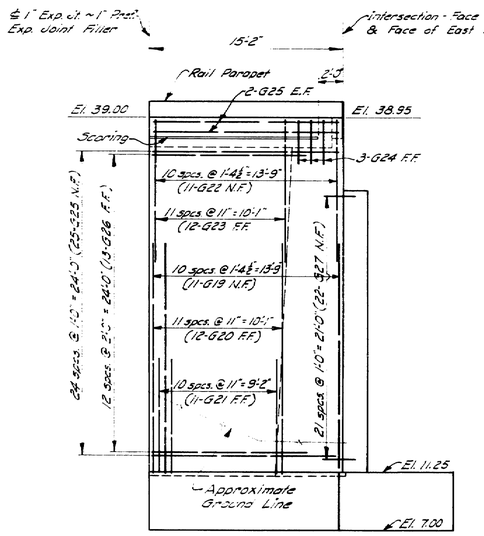
ABUTMENT PLAN

NOTE: Rail parapet & Concrete curb not shown. See "Plan M-M," sh. # 86

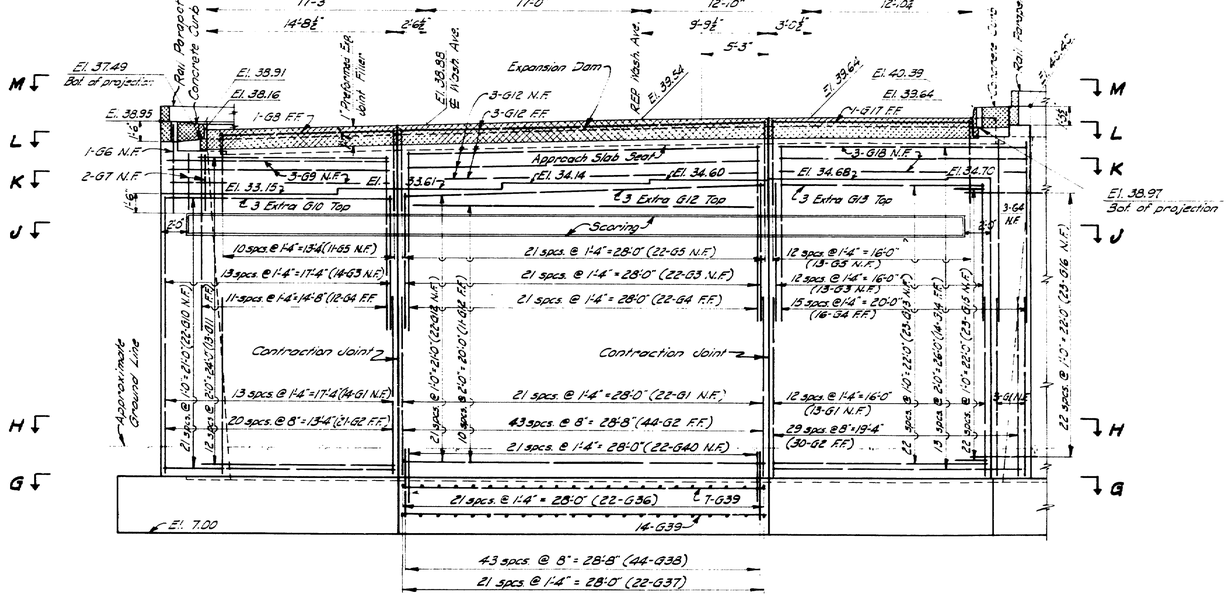
NOTE: Dress shaded bearing areas ½" larger all around than size of Masonry plates to exact elevations shown for bridge seats in "Elevation A-A". Place steel in bridge seats to clean anchor bolts.



ELEVATION B-B



DEVELOPED ELEVATION C-C



ELEVATION A-A

GENERAL NOTES

The following notes apply to details for both Abutment No.1, Abutment No. 2 & their retaining walls.

3" minimum cover for reinforcing steel.
N.F. means Near Face
F.F. " Far Face
E.F. " Each Face

For vertical joint details see sheet # 92
For Scoring details abutment face see sh. # 89
For Scoring details Walls see sheet # 91
For French Drain details see sheet # 85
For Curb Recess at Catch Basin see sh. # 90
For Aluminum Rail details see sh. # 120

Rail Parapets and Concrete Curbs to be placed after abutments and walls are constructed.

Work this sheet with sheet # 85

DESIGN – RISSEL DET. – A.H.R.	BRIDGE NO.
TRACE – CLARK	SURVEY –
CHECK – F.A.M. – A.B.P.	PLOT –

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

OVERPASS NO. 1
ABUTMENT NO. 1

SHEET 84 OF 166 AUGUSTA, MAINE OCT. 1957

76-84

0 1 2 3 4 5 INCHES

B P R REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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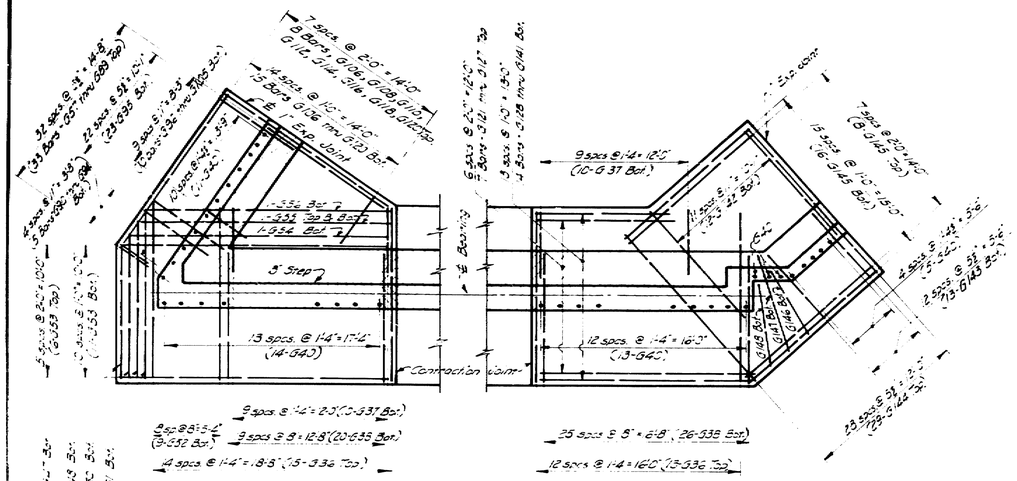
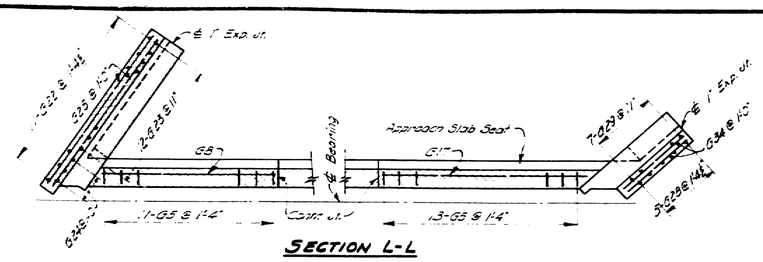
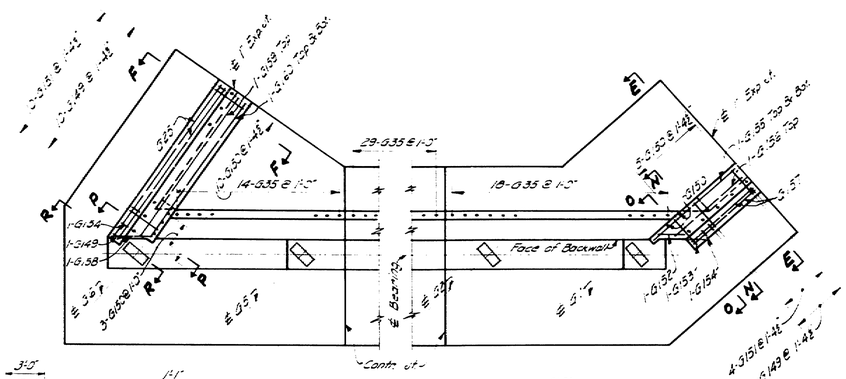


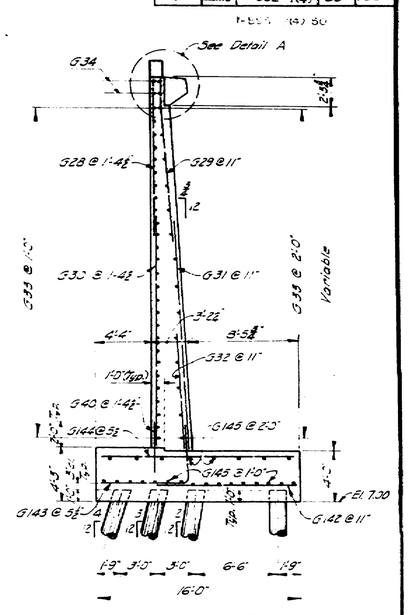
SECTION G-G



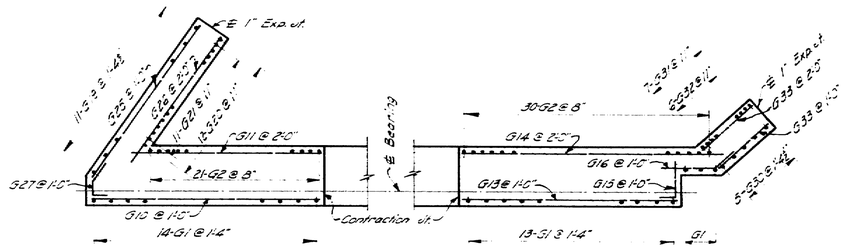
SECTION L-L



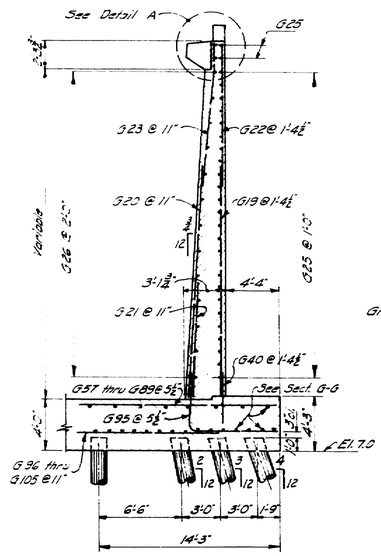
PLAN M-M



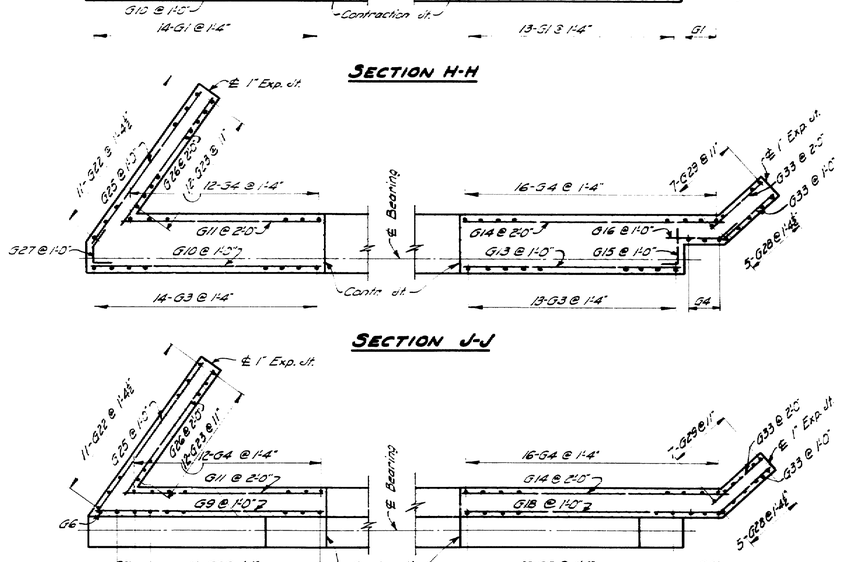
SECTION E-E



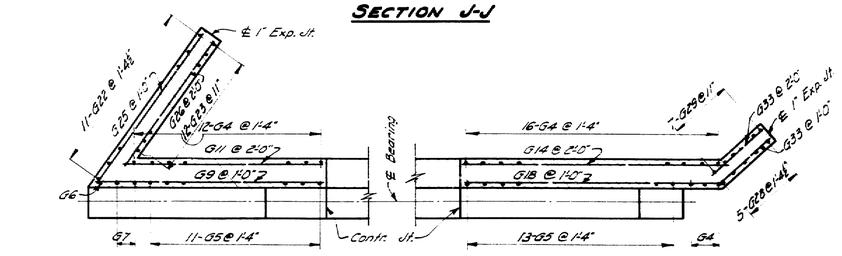
SECTION H-H



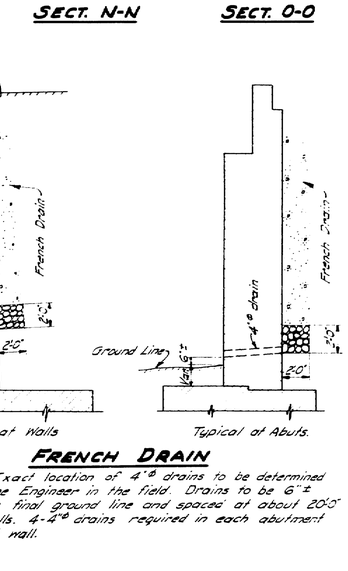
SECTION F-F



SECTION J-J

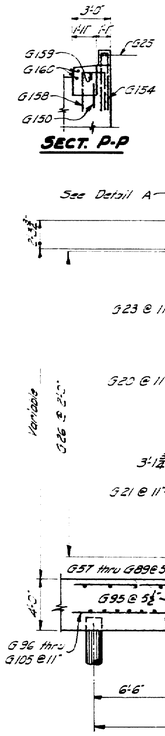


SECTION K-K

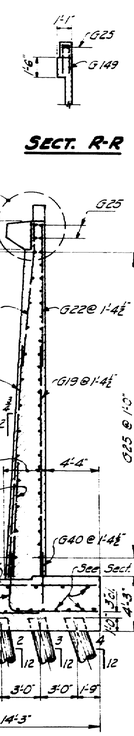


SECT. N-N

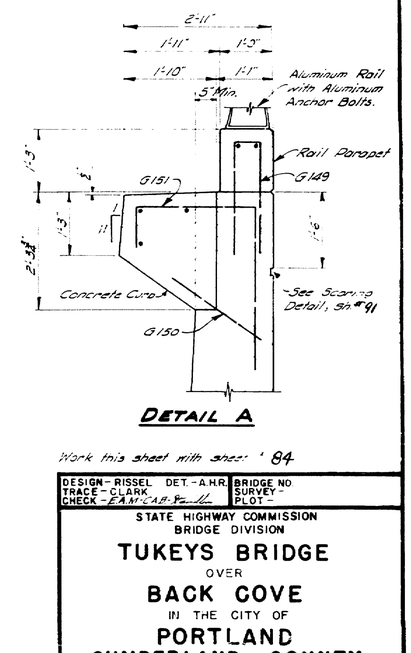
SECT. O-O



SECT. P-P



SECT. R-R



DETAIL A

FRENCH DRAIN

NOTE: Exact location of 4" ϕ drains to be determined by the Engineer in the field. Drains to be 6" ± above final ground line and spaced at about 20'-0" in walls. 4-4" ϕ drains required in each abutment breast wall.

Work this sheet with sheet # 84

DESIGN - RISSEL DET. - A.H.R.	BRIDGE NO.
TRACE - CLARK	SURVEY -
CHECK - E.A.M. - C.A.B. - R.J.L.	PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

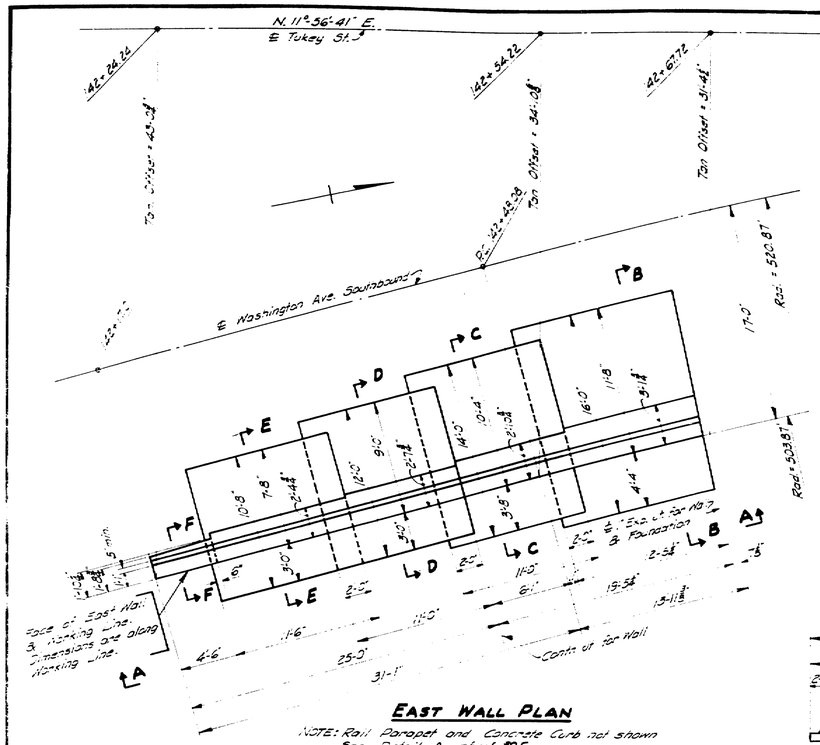
OVERPASS NO. 1
ABUTMENT NO. 1

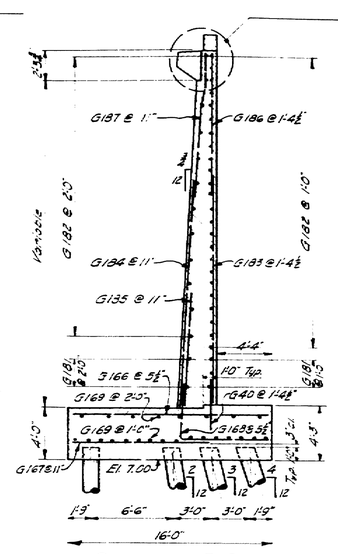
SHEET 85 OF 166 AUGUSTA, MAINE OCT. 1957

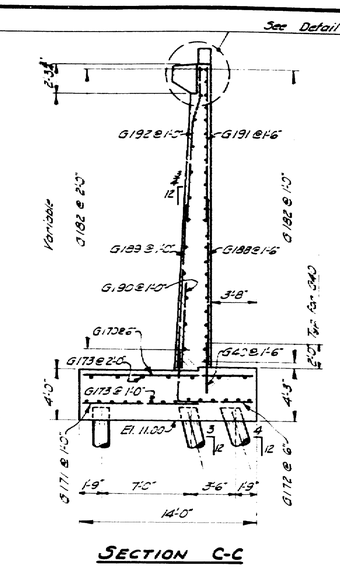
76-85

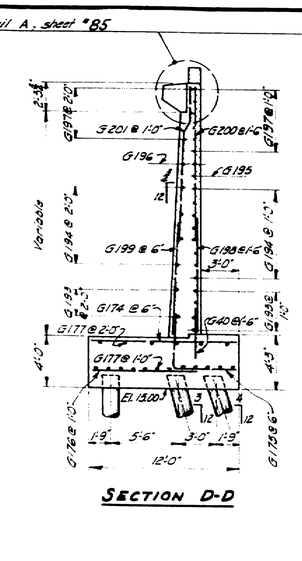
0 1 2 3 4 5 INCHES

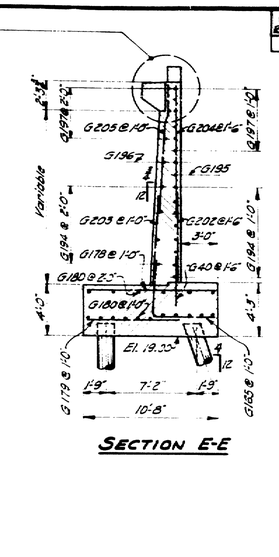
B. P. R. EEG NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F-082-1(4)	86	166

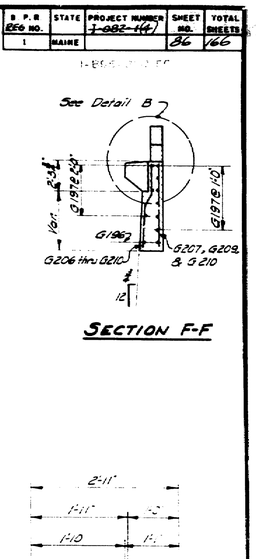


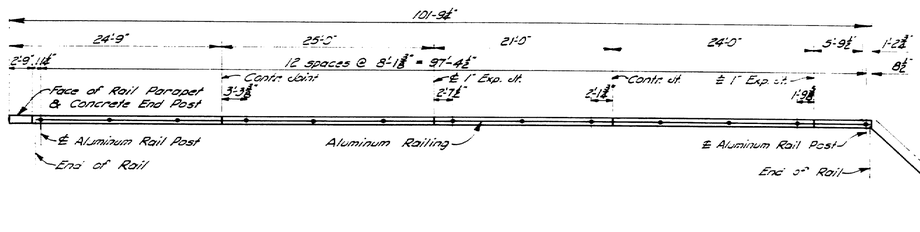


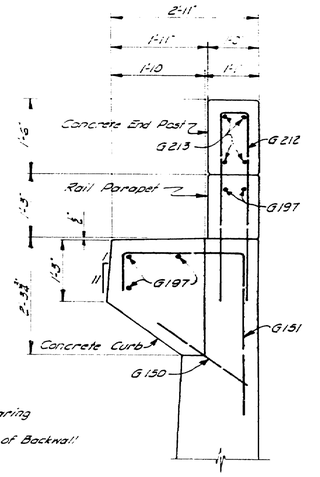


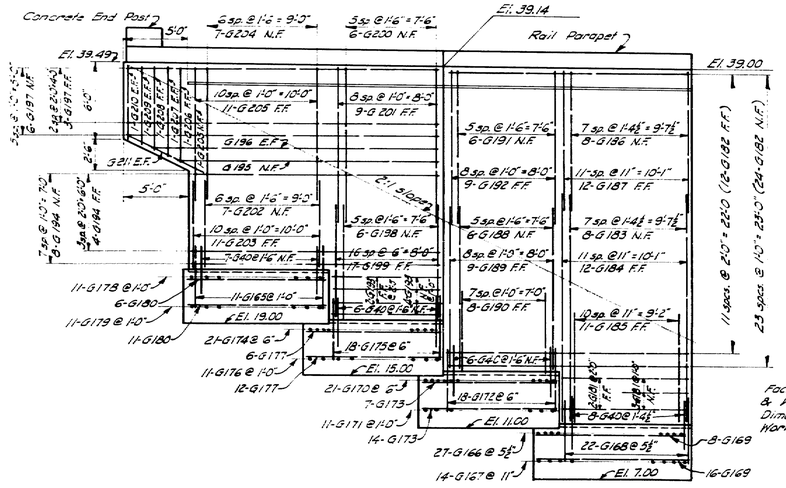


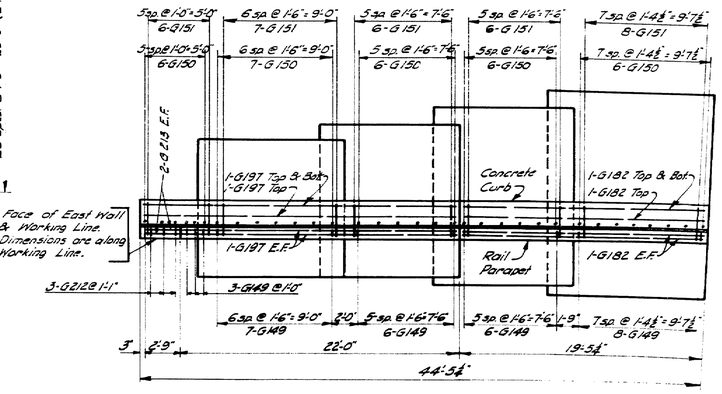


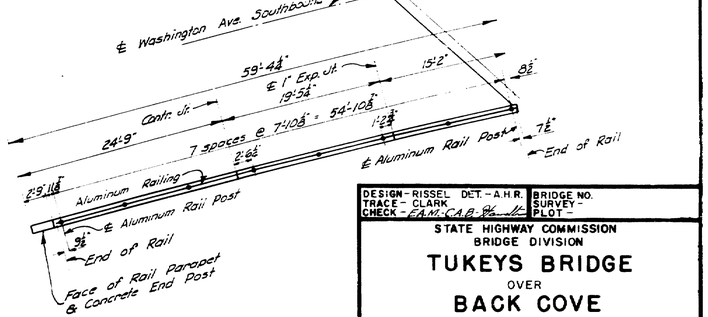












NOTE: See "General Notes" sheet #84

DESIGN - RISSEL DET. - A.H.R.	BRIDGE NO.
TRACE - CLARK	SURVEY -
CHECK - E.A.M. C.A.B. 9/6 W.	PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

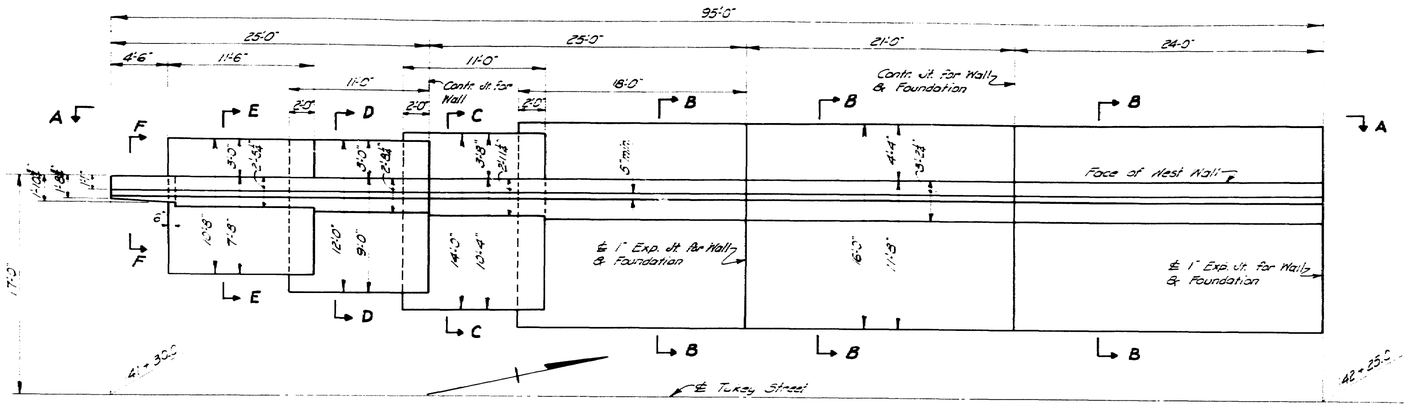
OVERPASS NO. 1
ABUTMENT NO. 1 - EAST WALL

SHEET 86 OF 166 AUGUSTA, MAINE OCT. 1957

0 1 2 3 4 5 INCHES

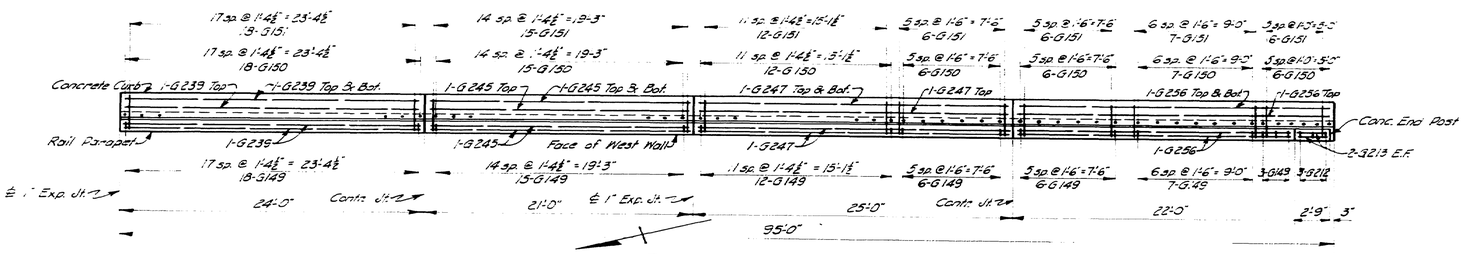
76-86

B. P. R. Proj. No.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-082-1(6)	87	166



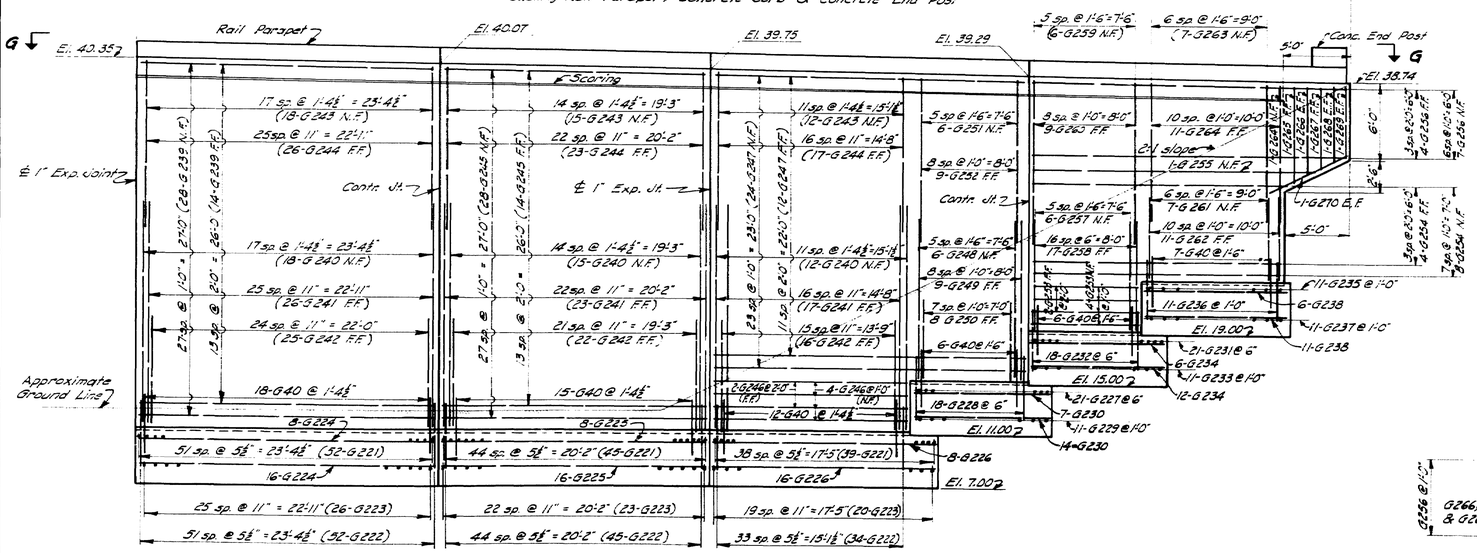
WEST WALL PLAN

Rail Parapet & Concrete Curb not shown.
See detail A, sheet #85

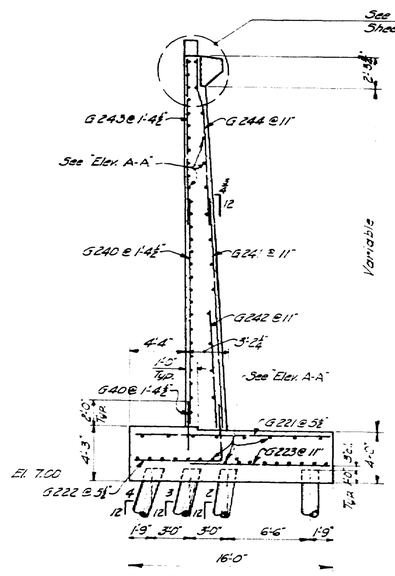


PLAN G-G

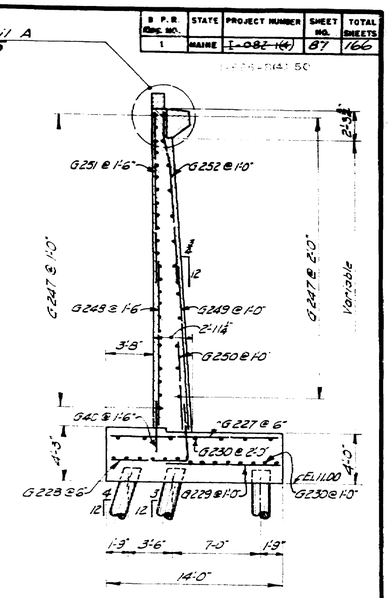
Showing Rail Parapet, Concrete Curb & Concrete End Post



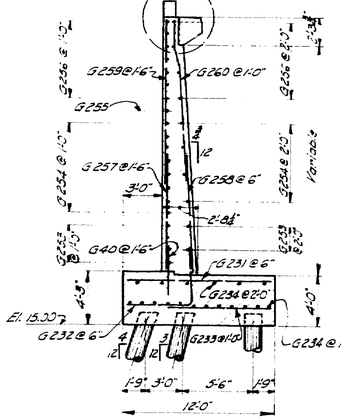
ELEVATION A-A



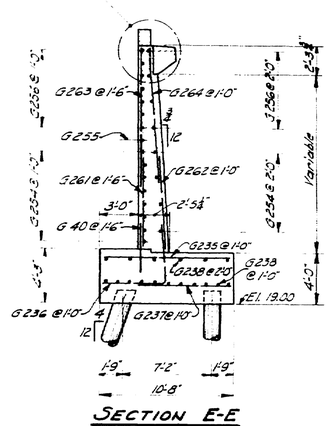
SECTION B-B



SECTION C-C

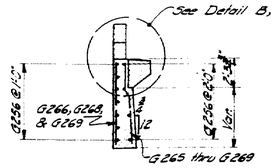


SECTION D-D



SECTION E-E

NOTE: See General Note, Sheet #84



SECTION F-F

DESIGN - RISSEL DET. - A.H.R.
TRACE - CLARK
CHECK - E.A.M. - C.A.P. - W.L.

BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

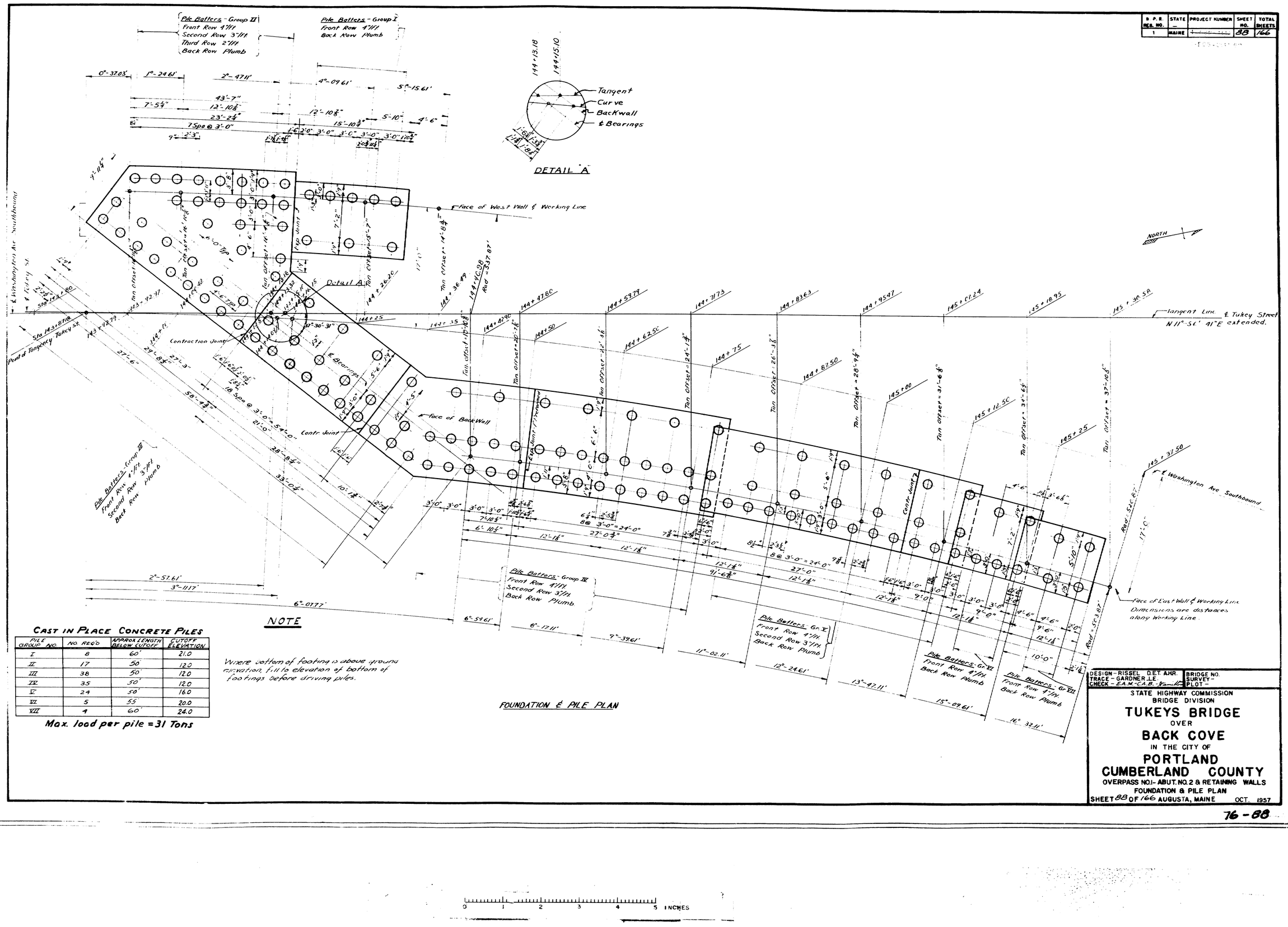
OVERPASS NO. 1
ABUTMENT NO. 1 - WEST WALL

SHEET 87 OF 166 AUGUSTA, MAINE OCT. 1957

76-87

0 1 2 3 4 5 INCHES

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	[illegible]	88	166



NOTE

Where bottom of footing is above ground elevation, fill to elevation of bottom of footings before driving piles.

CAST IN PLACE CONCRETE PILES

PILE GROUP NO.	NO. REQ'D	APPROX LENGTH BELOW CUTOFF	CUTOFF ELEVATION
I	8	60'	21.0
II	17	50	12.0
III	38	50'	12.0
IV	35	50'	12.0
V	24	50'	16.0
VI	5	55'	20.0
VII	4	60'	24.0

Max. load per pile = 31 Tons

FOUNDATION & PILE PLAN

DESIGN - RISSEL D.E.T. A.H.R.
TRACE - GARDNER L.E.
CHECK - E.A.M. C.A.B.

BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

OVERPASS NO. 1 - ABUT. NO. 2 & RETAINING WALLS
FOUNDATION & PILE PLAN
SHEET 88 OF 166 AUGUSTA, MAINE OCT. 1957

76-88

0 1 2 3 4 5 INCHES

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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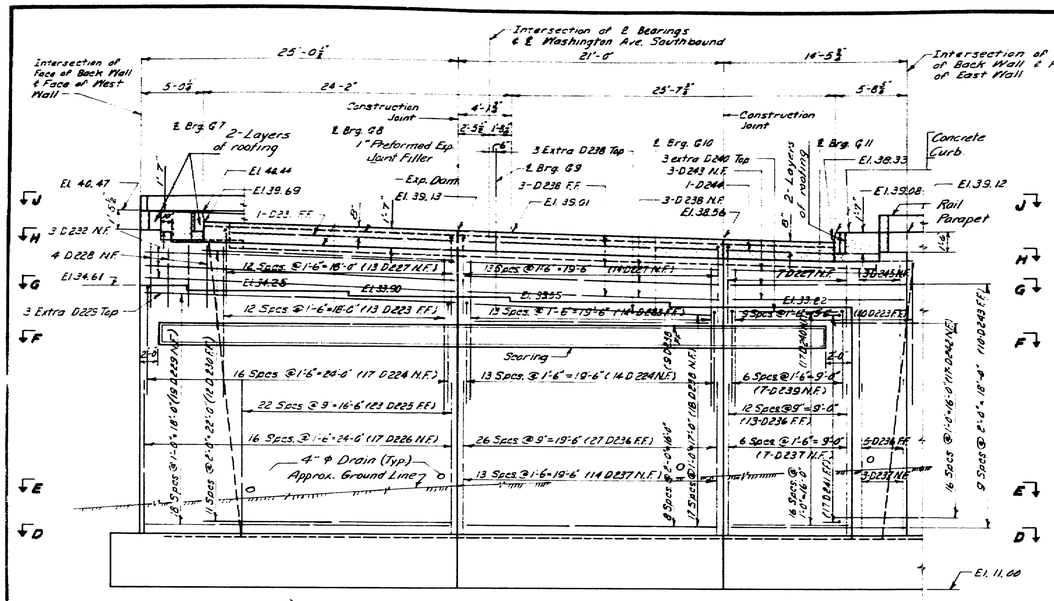
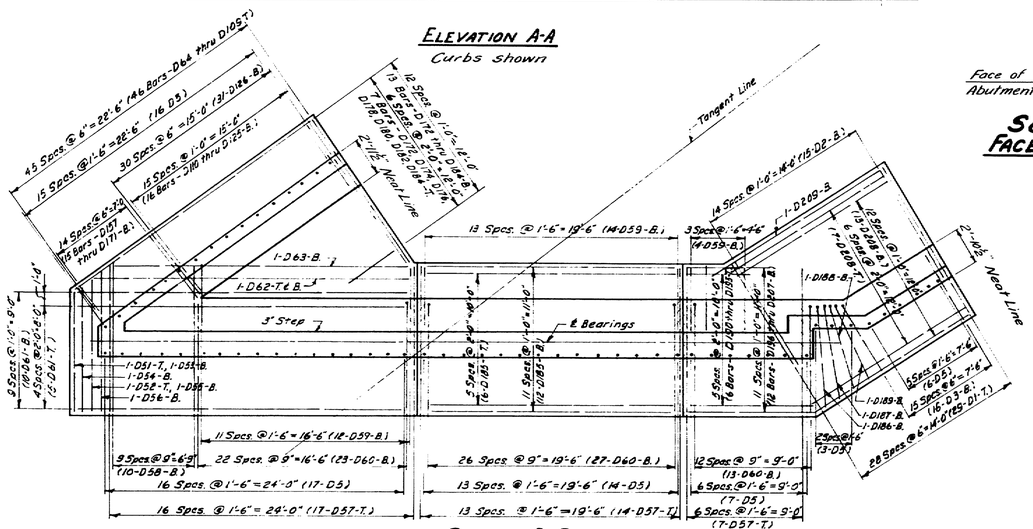
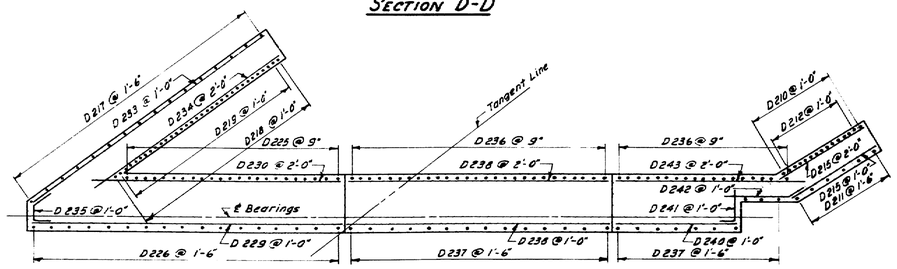


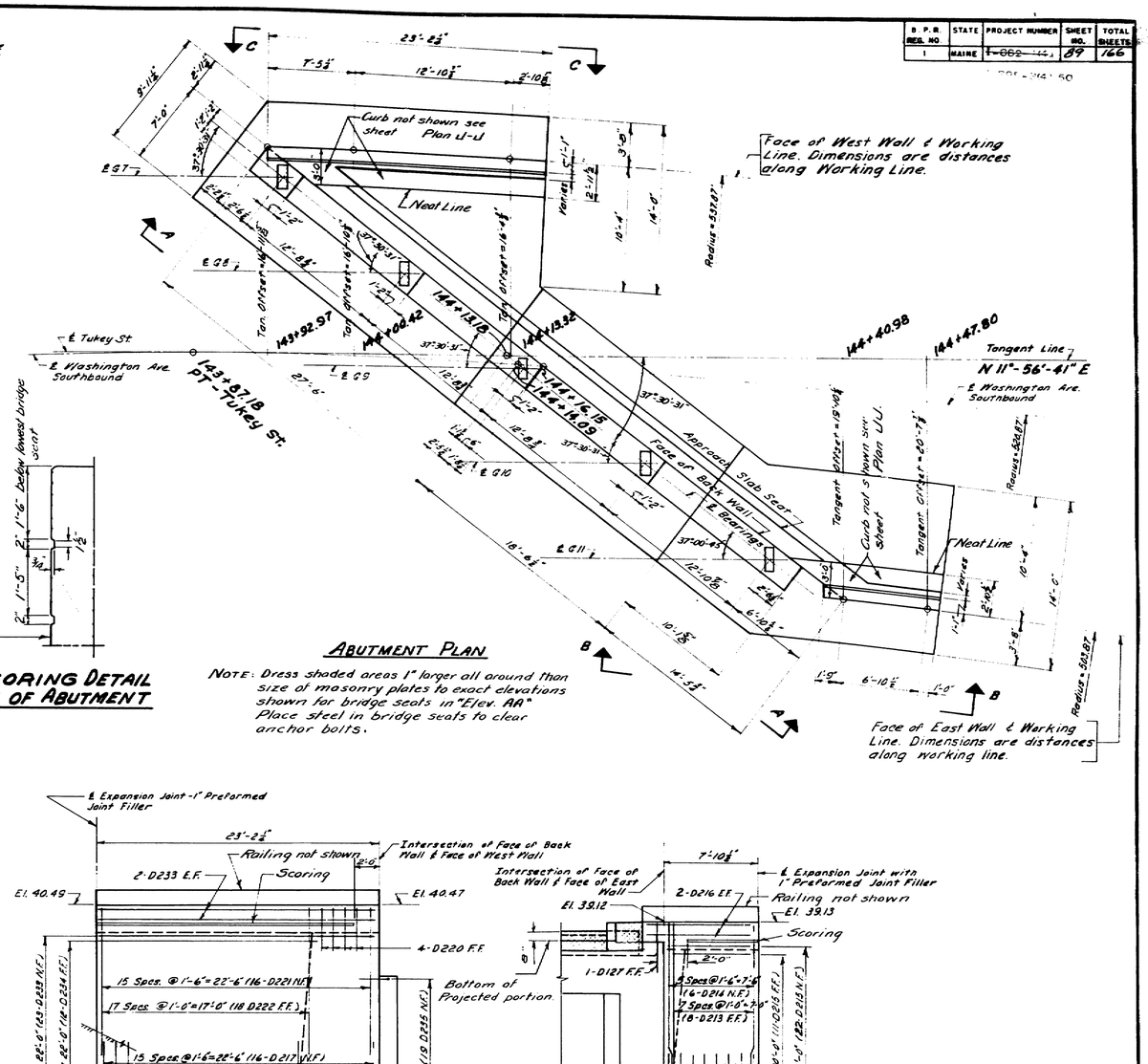
ELEVATION A-A
Curbs shown



SECTION D-D

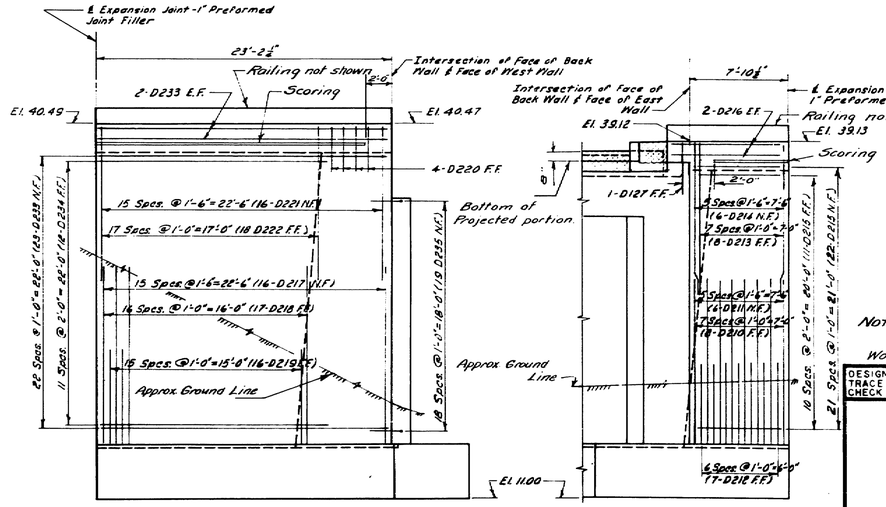


SECTION E-E



ABUTMENT PLAN

NOTE: Dress shaded areas 1" larger all around than size of masonry plates to exact elevations shown for bridge seats in "Elev. AA" Place steel in bridge seats to clear anchor bolts.



ELEVATION C-C

ELEVATION B-B
Curb shown

NOTE: See General Note, sheet No. 84

Work this sheet with sheet No. 90

DESIGN - RISSEL, DET - A.H.R.
TRACE - AULT
CHECK - E.A.M.-C.A.B.-R.H.

BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

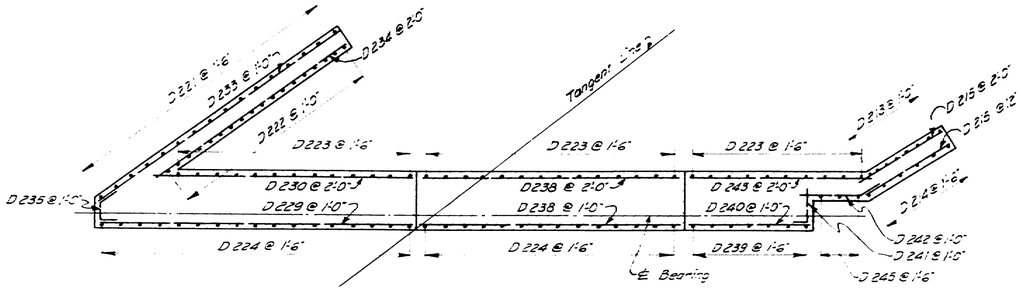
OVERPASS NO. 1
ABUTMENT NO. 2

SHEET 89 OF 166 AUGUSTA, MAINE OCT. 1957

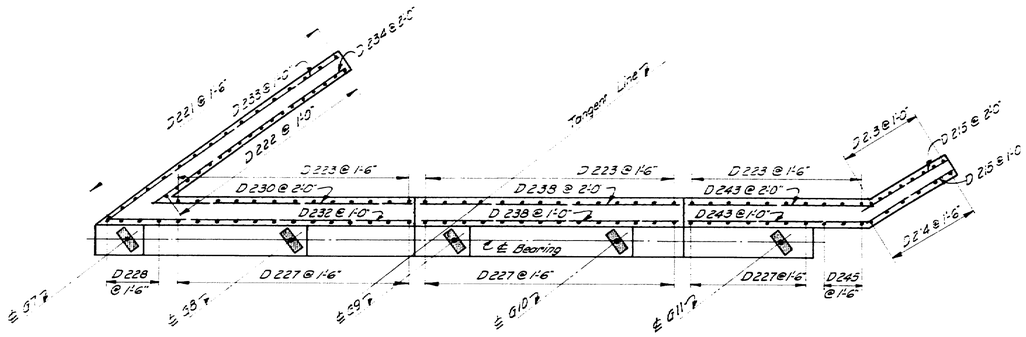
76-89

0 1 2 3 4 5 INCHES

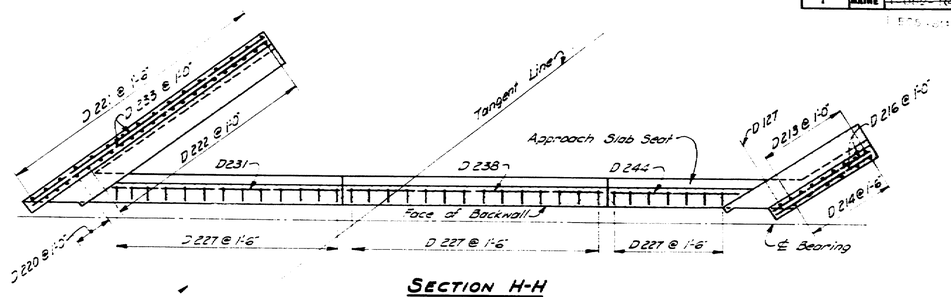
B. P. R. SEC. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	[illegible]	90	166



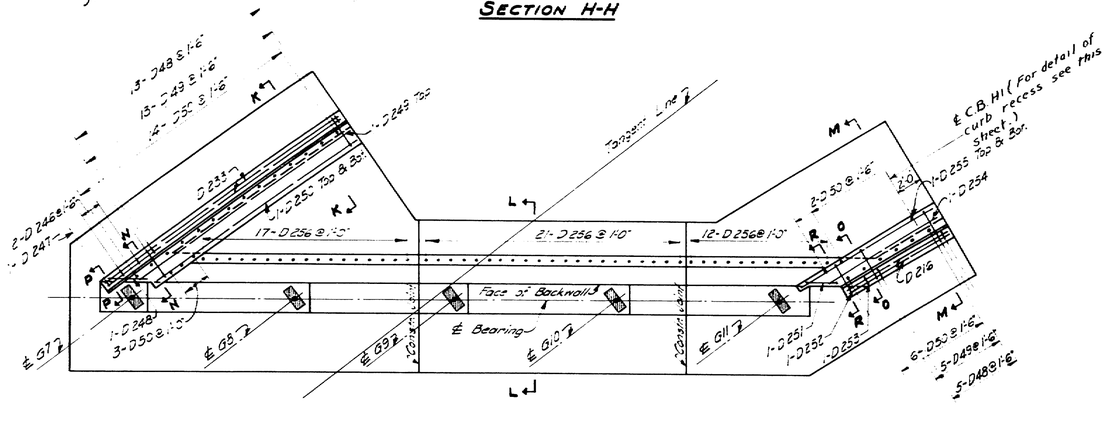
SECTION F-F



SECTION G-G

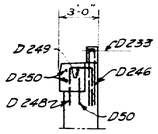


SECTION H-H

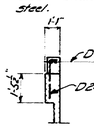


PLAN J-J

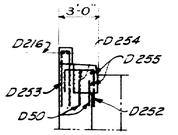
Place reinforcing steel in bridge seat to clear anchor bolts. 3" min. clear all reinf. steel.



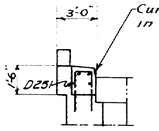
SECT. N-N



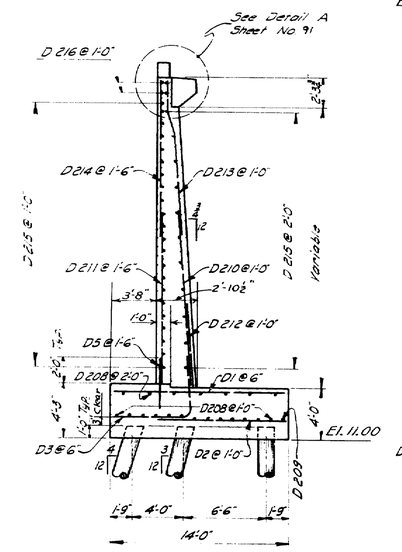
SECT. P-P



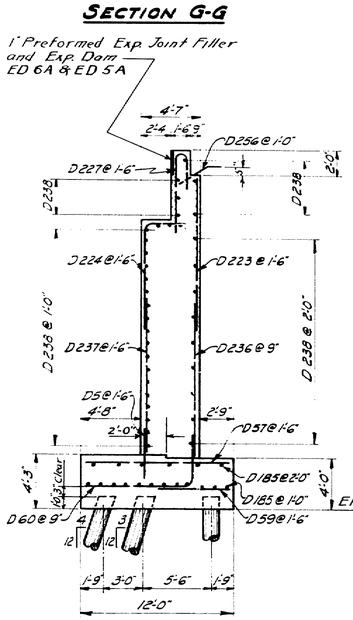
SECT. O-O



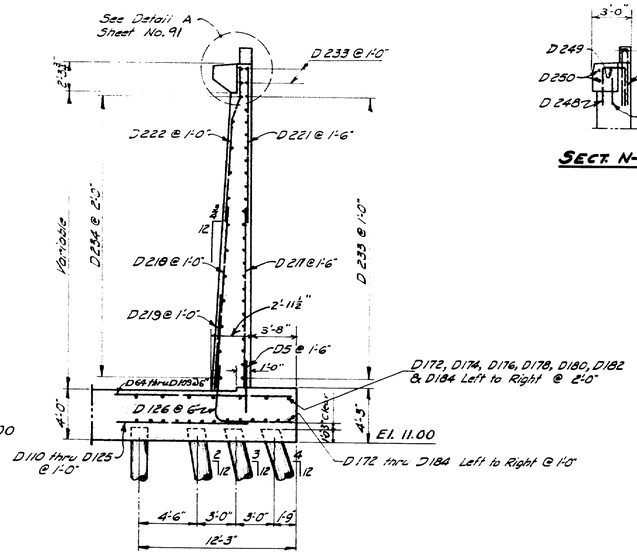
SECT. R-R



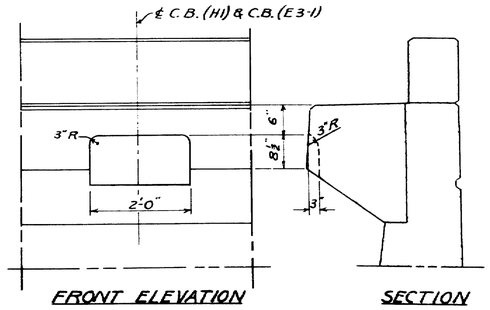
SECTION M-M



SECTION L-L



SECTION K-K



FRONT ELEVATION — SECTION

CURB RECESS AT CATCH BASINS

Note: See General Note - Sheet No. 84

Work this sheet with Sheet No. 89

DESIGN - RISSEL DET. - A.H.R. BRIDGE NO.
TRACE - CLARK SURVEY -
CHECK - E.A.M. - C.A.B. - J.L. PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

OVERPASS NO. 1
ABUTMENT NO. 2

SHEET 90 OF 166 AUGUSTA, MAINE OCT. 1957

76-90

0 1 2 3 4 5 INCHES

B P R REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~F-055-1(4)~~	91	166

F-03-3(43) 50

Sta 143+87.18
Point of Tangency Tukey St

Tangent Line (℄ Tukey Street, extended)
N 11°-56'-41" E

Sta 143+87.18 | 144+4.61 | 144+54.09 | 144+71.73 | 144+96.43 | 145+07.94 | 145+16.45 | 145+36.66

Tan Offset 10'-7.8" | Tan Offset 20'-1.6" | Tan Offset 24'-1.2" | Tan Offset 26'-3.8" | Tan Offset 28'-9.2" | Tan Offset 31'-6.4" | Tan Offset 34'-6.5" | Tan Offset 37'-10.5"

SECTION B-B

See DETAIL A

D19@18" D20@12" See ELEVATION D17@18" D18@6" D14@6" D12@6" D5@18" D15 or D16 @ 24" D13@12" D15 or D16 @ 12"

3'-0" 1'-0" 2'-7⅞" 2'-0" Typ. 4'-3" 4'-0" Variable 12" 1'-9" 3'-0" 5'-6" 1'-9" 12'-0"

SECTION C-C

See DETAIL A

D34@18" D35@12" See ELEVATION D32@18" D33@12" D30@12" D28@12" D31@24" D5@18" D31@12" D29@12"

3'-0" 1'-0" 2'-4½" 2'-0" Typ. 2'-3" Variable 12" 1'-9" 7'-2" 1'-9" 10'-8"

EAST WALL PLAN

NOTE: Rail Parapet & Concrete Curb not shown, See Detail "A"

Exp Jnt for Wall & Foundation | Contr Jnt for Wall | Contr Jnt for Wall & Foundation

2'-10½" Constant | 2'-7½" Constant | 2'-4½" Constant | 2'-1½" Constant | 5" Minimum

10'-4" Variable | 14'-2" | 10'-6" | 10'-4" | 3'-8" | 3'-0" | 2'-0" | 12'-0" | 9'-0" | 3'-0" | 7'-8" | 5'-0" | 2'-0" | 6'-4" | 9'-4" | 3'-0"

10" | 12'-1⅞" | 27'-0¾" | 25'-0¾" | 12'-1⅞" | 12'-1⅞" | 30'-0" | 29'-0" | 12'-1⅞" | 12'-1⅞" | 5'-0" | 5'-1⅞" | 1'-4" | 11'-0" | 32'-0" | 12'-1⅞" | 11'-6" | 6⅝" | 2'-6" | 4'-6" | 2'-6"

℄ Washington Ave. Southbound

Rail = 5'-1.87"

145+40.00 | 145+52.00

Face of East Wall & Working Line
Dimensions are are distances along Working Line

See DETAIL A

SECTION A-A

D9@18" D10@12" D11@12" D11@24" Alt. D7 & D8 @ 6" D6@18" 3'-8" 1'-0" Typ. 2'-10½" D5@18" D3@6" D1@6" D4@24" 4'-3" 3'-0" 4'-0" D4@12" D2@12" Variable 12" 1'-9" 4'-0" 6'-6" 1'-9" 14'-0"

DEVELOPED EAST WALL ELEVATION

FRONT

Elev. 39.13 | Elev. 39.15 | Elev. 39.19 | Elev. 39.31

Scoring | 1-D11 E.F. | 1-D21 E.F. | Rail Parapet 7 | 1-D27 E.F. | 1-D43 FF

Approx Ground Line | Expansion Joint | Contraction Joint | Cont. Jnt.

(11 D9 NF) (25 D10 FF) | (20 D19 NF) (29 D20 FF) | D10@12" (FF) | D20@12" (FF) | D7@12" (FF) | D18@6" (FF) | D8@12" (FF)

(2 D11 NF) (12 D11 FF) | 18'-0" | (19 D21 NF) (10 D21 FF)

24'-6" (17 D6 NF) (25 D7 & 29 D8 FF) | 19 Spa @ 1'-6" = 28'-6" (20 D5 NF) | 28'-6" (20 D17 NF) (58 D18 FF) | 3'-0"

16 Spa @ 1'-6" = 24'-0" (17 D5 NF) | 56 Spa @ 6" (57 D12) | 6 D15 | 12 D15 | Elev 15.00

52 Spa @ 6" = 26'-0" (53 D1) | (7 D4) | (14 D4) | Elev 11.00

48 Spa @ 6" = 24'-0" (49 D3) | 56 Spa @ 6" = 28'-0" (57 D14) | 28 Spa @ 1'-0" = 28'-0" (29 D13)

26 Spa @ 1'-0" = 26'-0" (27 D2)

(5 D19 NF) (7 D20 FF) | (3 D22 FF) | (6 D21 NF) (1 D26 E.F.) (1 D25 N.F.) (6 D34 N.F.) (10 D35 F.F.) | (5 D17 NF) (13 D18 FF) | (2 D24 FF) (4 D24 NF) | (6 D32 NF) (9 D33 FF) | (2 D23 FF) (4 D23 NF) | (5 D5 NF) | (2 D22 FF) | (3 D22 NF) | (13 D16) | 12 Spa @ 6" = 6'-0" | 8 Spa @ 1'-0" (9 D13)

2:1 Slope | (8 D46 NF) (11 D41 FF) | (8 D5) | 6 D39 | 10 Spa @ 1'-0" (11 D36) | 9 D39 | Elev. 23.00 | 10 Spa @ 1'-0" (11 D28) | (11 D31) | Elev 19.00 | 10 Spa @ 1'-0" = 10'-0" (11 D38) | (11 D37) | 8 Spa @ 1'-0" = 8'-0" (9 D30) | 10 Spa @ 1'-0" = 10'-0" (11 D29)

1 D44 E.F. | 1 D45 F.F. | 1 D46 E.F. | 1 D47 E.F. | 1 D42 FF | 6'-0" | 2'-6" | 5'-0"

Concrete end p... See Detail B Sheet No 92

SECTION D-D

See DETAIL A

See ELEVATION D40@18" D41@12" 3'-0" 2'-1½" D38@12" D36@12" D39@9" D5@18" 2'-0" Typ. 4'-3" 4'-0" Variable D37@12" D37@12" 1'-9" 5'-10" 1'-9" 9'-4"

SCORING DETAIL

3" 1'-6" 1'-6" 2"

SECTION E-E

See DETAIL A

See ELEVATION D43, D44 D45, D46, & D47 D44, D46 & D47 D42 Variable 2'-3⅜"

DETAIL A

2'-11" 1'-0" 1'-11" 1:1 5" Minimum Aluminum Rail with Aluminum Anchor Bolts See Sheet 120. 57 D48@18" Rail Parapet 3'-3" 1'-3" 2'-3½" 3-D11 3-D21 3-D27 57 D49@18" See SCORING DETAIL Concrete Curb 59 D50@18

Note: See General Note, Sheet No. 84

0 1 2 3 4 5 INCHES

DESIGN - RISSEL DET. A.H.R.
TRACE - GARDNER
CHECK - E.A.M. - C.A.B.

BRIDGE NO.
SURVEY -
PLOT -

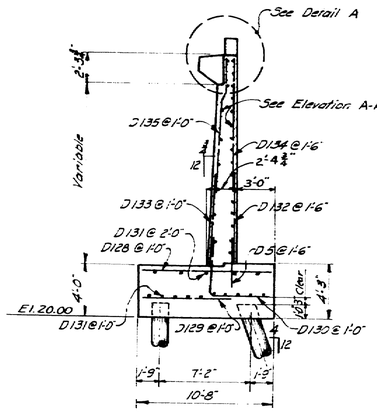
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
OVERPASS NO. 1
ABUTMENT NO 2 EAST WALL

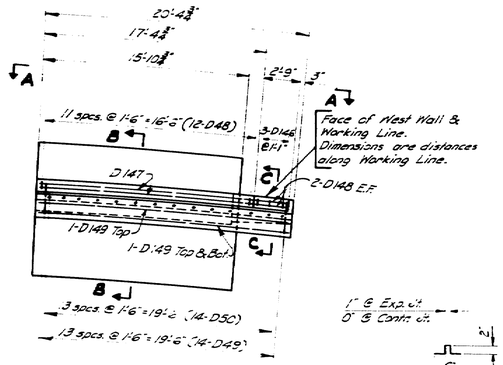
SHEET 91 OF 166 AUGUSTA, MAINE OCT. 1957

76-91

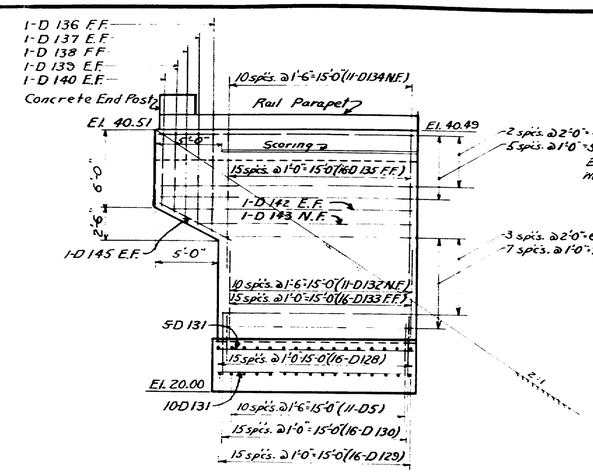
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~1-052 144~~	92	166



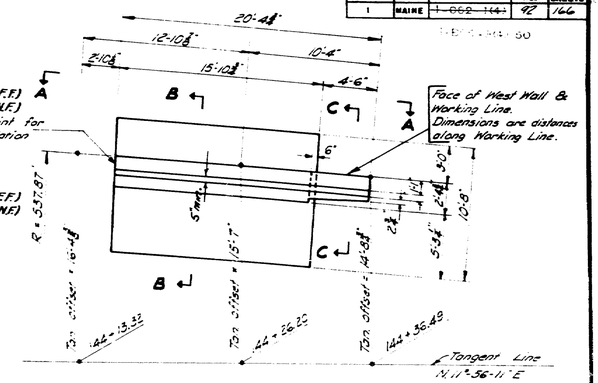
SECTION B-B



WEST WALL - PLAN

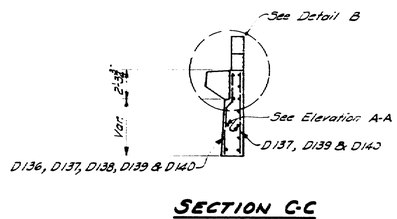


DEVELOPED ELEVATION A-A

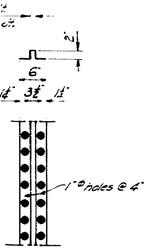


WEST WALL - PLAN

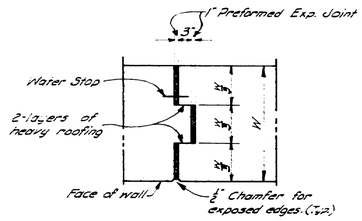
NOTE: Rail parapet and concrete curb not shown.



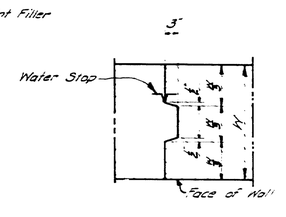
SECTION C-C



WATER STOP
16 oz. Copper



EXPANSION JOINT



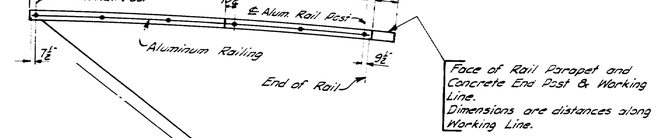
CONTRACTION JOINT

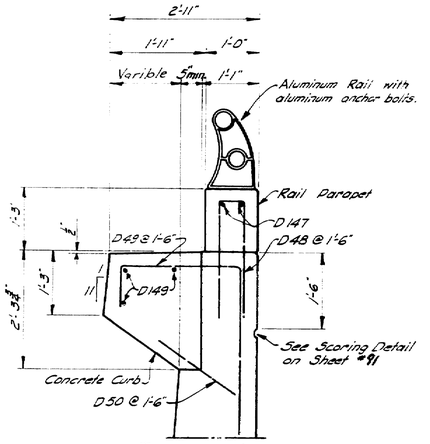
NOTES

Expansion Joint Filler to extend full height of wall, and footing.

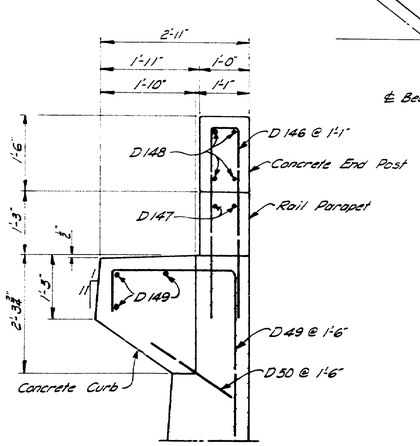
Water Stop and Shear Key to stop 6" below top of wall.

Cover the Contraction and Expansion Joints on the back side with 2-layers of heavy roofing 10" wide. Coat the surface of the concrete and each layer of roofing as applied with a suitable grade of roofing cement. Recess area to be covered 1/4".

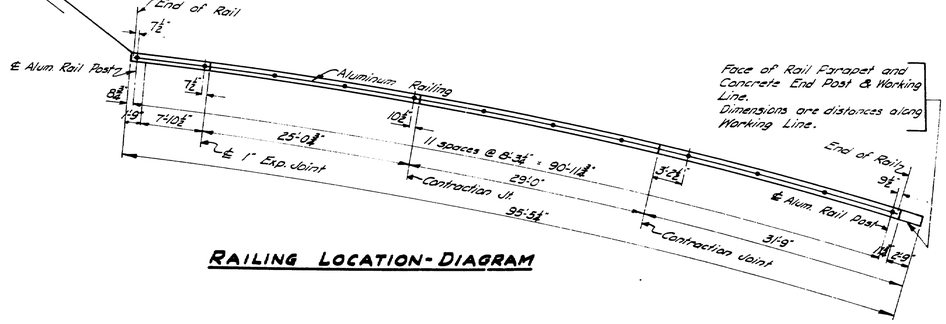




DETAIL A



DETAIL B



RAILING LOCATION-DIAGRAM

Note: See General Note - sheet No. 84

DESIGN - RISSEL DET. - A.H.R.
TRACE - CLARK
CHECK - E.A.M. CAP. - W.

BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

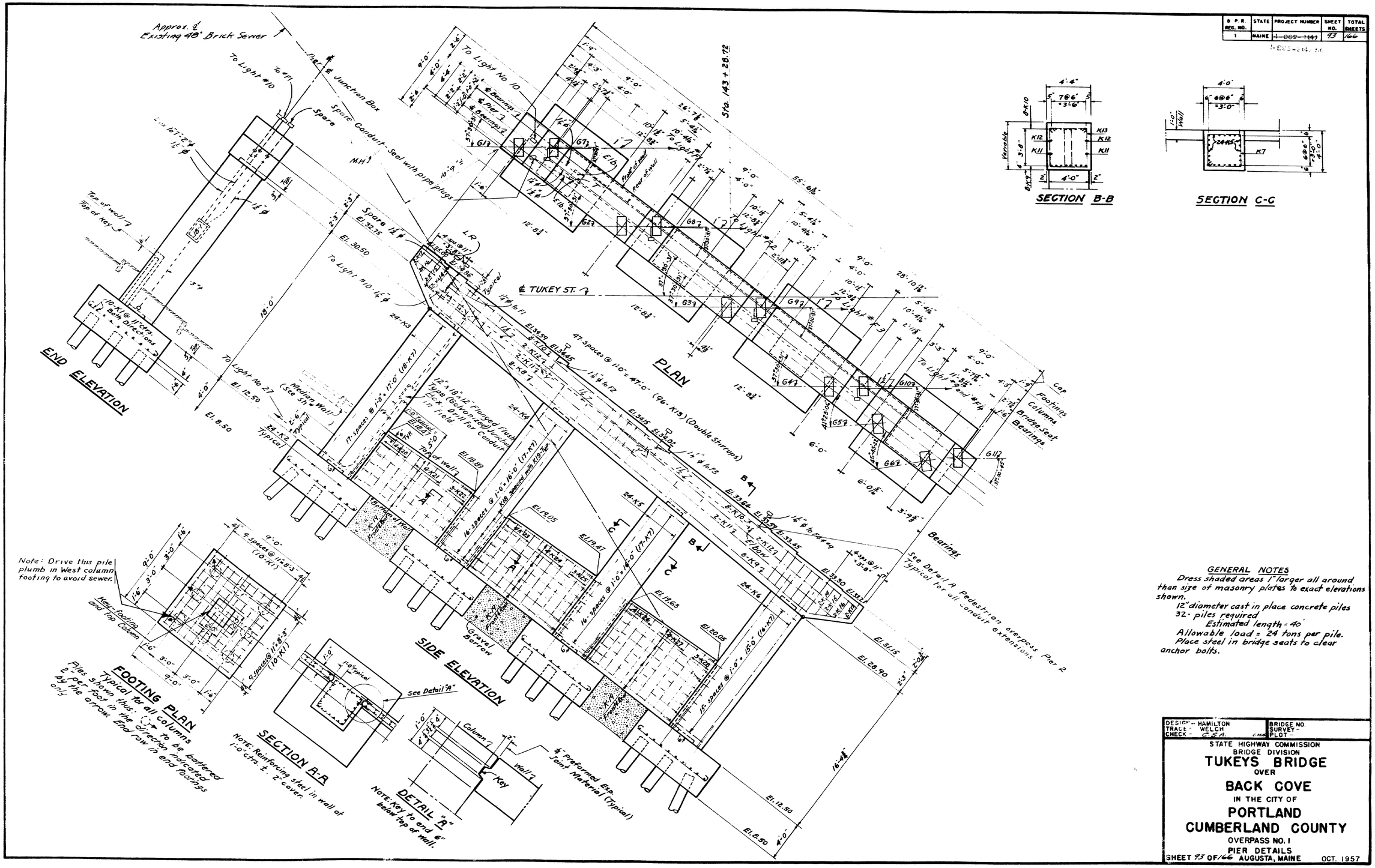
OVERPASS NO. 1
ABUTMENT NO. 2 - WEST WALL

SHEET 92 OF 166 AUGUSTA, MAINE OCT. 1957

76-92

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~I-000-1(47)~~ I-295-1(6), M	93	166



DESIGN - HAMILTON
TRACE - WELCH
CHECK - G.S.A. CHM

BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

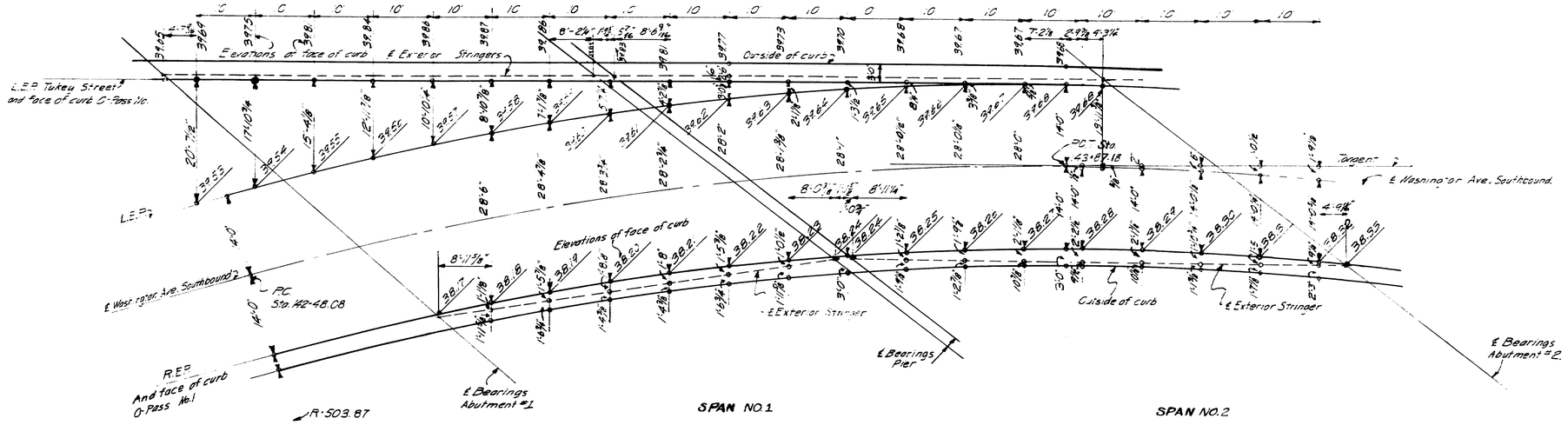
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
OVERPASS NO. 1
PIER DETAILS

SHEET 93 OF 166 AUGUSTA, MAINE OCT. 1957

76-93

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~1-062-1(43)~~	98	166

1-063-3(4), etc.



Notes:

All elevations shown are finish grades.
All offsets back of Sta. 143+87.18 are measured from and normal to L.E.P. Tukey Street.
All offsets ahead of P.C.T. are measured from and normal to ℄ tangent of Washington Ave. Southbound.

DESIGN - PS
TRACE - M.W.B.
CHECK - M.E.R.
BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

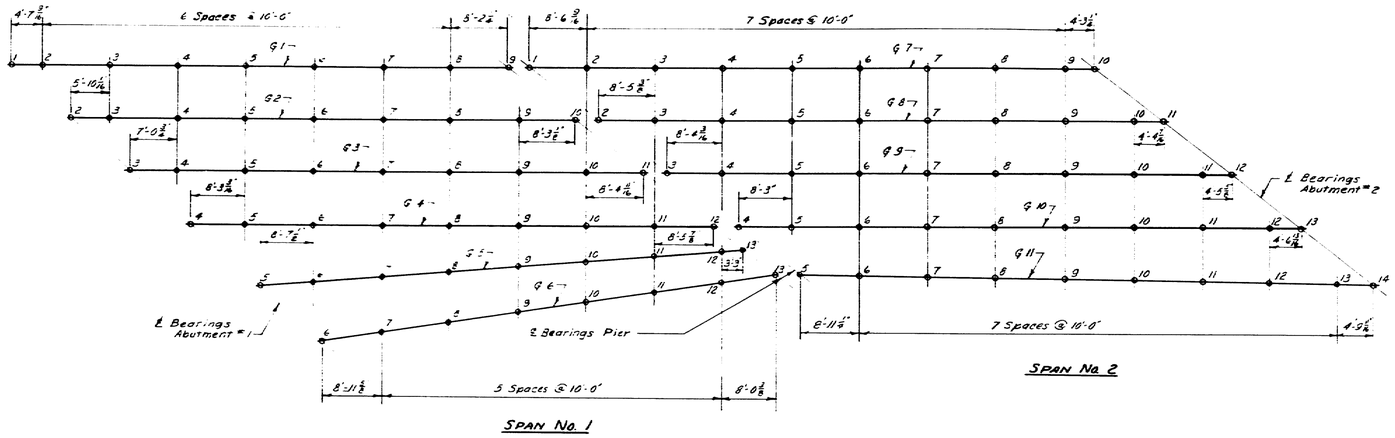
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

OVERPASS NO.1
SUPERSTRUCTURE- SLAB LAYOUT
SHEET 98 OF 166 AUGUSTA, MAINE OCT. 1957

76-34

0 1 2 3 4 5 INCHES

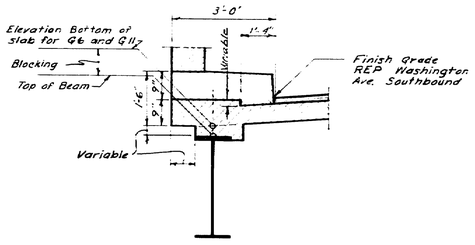
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~1-C-5-1(4)~~ C-5-3(4) 50	95	166



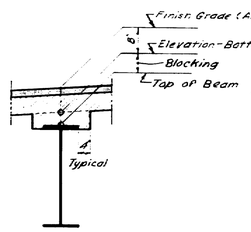
SPAN No. 1

SPAN No. 2

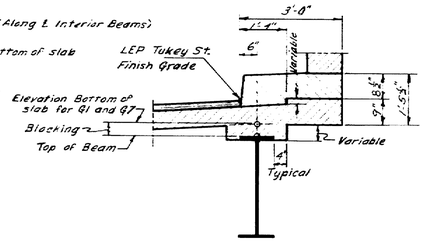
PLAN
Showing Location of Points on Beams



TYPICAL SECTION
G6-G11



TYPICAL SECTION
INTERIOR STRINGERS



TYPICAL SECTION
G1-G7

Point		Final Finish Grade L.E.P. or R.E.P.	Final Finish Grade ℄ Beam	Elevation Bottom of slab	Blocking @ ℄ of Bearings
G1	1	39.65		38.98	2¼"
	2	39.69		39.04	
	3	39.75		39.15	
	4	39.81		39.23	
	5	39.84		39.27	
	6	39.86		39.29	
	7	39.87		39.29	
	8	39.86		39.25	
	9	39.84		39.19	
G2	2		39.65	38.98	2½"
	3		39.66	39.02	
	4		39.69	39.05	
	5		39.68	39.10	
	6		39.67	39.10	
	7		39.63	39.05	
	8		39.59	38.99	
	9		39.52	38.89	
	10		39.47	38.80	
G3	3		39.57	38.96	2½"
	4		39.55	38.93	
	5		39.46	38.86	
	6		39.37	38.80	
	7		39.28	38.71	
	8		39.20	38.63	
	9		39.13	38.55	
	10		39.08	38.45	
	11		39.03	38.36	
G4	4		39.20	38.53	3½"
	5		39.08	38.45	
	6		38.95	38.40	
	7		38.90	38.33	
	8		38.82	38.26	
	9		38.75	38.18	
	10		38.69	38.10	
	11		38.64	38.01	
	12		38.60	37.93	
G5	5		38.66	37.99	3½"
	6		38.60	37.97	
	7		38.54	37.94	
	8		38.50	37.92	
	9		38.46	37.88	
	10		38.43	37.84	
	11		38.41	37.81	
	12		38.41	37.76	
	13		38.40	37.73	
G6	6	38.17		37.47	3"
	7	38.18		37.49	
	8	38.19		37.51	
	9	38.20		37.52	
	10	38.21		37.53	
	11	38.22		37.54	
	12	38.23		37.54	
	13	38.24		37.54	

Point		Final Finish Grade L.E.P. or R.E.P.	Final Finish Grade ℄ Beam	Elevation Bottom of slab	Blocking @ ℄ of Bearings
G7	1	39.83		39.18	3½"
	2	39.81		39.21	
	3	39.77		39.21	
	4	39.73		39.19	
	5	39.70		39.17	
	6	39.68		39.16	
	7	39.67		39.13	
	8	39.67		39.10	
	9	39.68		39.06	
	10	39.68		39.03	
G8	2		39.45	38.78	3½"
	3		39.41	38.79	
	4		39.37	38.80	
	5		39.34	38.80	
	6		39.32	38.79	
	7		39.31	38.78	
	8		39.31	38.76	
	9		39.32	38.73	
	10		39.33	38.70	
	11		39.34	38.67	
G9	3		39.02	38.35	3½"
	4		38.99	38.37	
	5		38.96	38.39	
	6		38.93	38.40	
	7		38.92	38.39	
	8		38.92	38.39	
	9		38.93	38.38	
	10		38.95	38.36	
	11		38.97	38.33	
	12		38.99	38.32	
G10	4		38.59	37.92	3½"
	5		38.57	37.95	
	6		38.55	37.98	
	7		38.54	38.00	
	8		38.53	38.00	
	9		38.54	38.01	
	10		38.56	38.01	
	11		38.59	38.00	
	12		38.63	37.98	
	13		38.64	37.97	
G11	5	38.24		37.54	3½"
	6	38.25		37.57	
	7	38.26		37.59	
	8	38.27		37.62	
	9	38.28		37.63	
	10	38.29		37.64	
	11	38.30		37.64	
	12	38.31		37.64	
	13	38.32		37.64	
	14	38.33		37.64	

Note:
After beams are in position, the elevations shown above for Bottom of Slab should be set at points indicated. The difference between this elevation and the top of the beam is the blocking at that point.

After concrete is placed, the dead load (concrete and surfacing) should produce proper deflections to give final finished grades.

Beam	Camber	D.L. deflection at ℄ beam due to concrete and surfacing only.
G1	3"	1½"
G2	3"	1 7/16"
G3	3"	1½"
G4	3½"	1 7/16"
G5	3"	1⅜"
G6	2½"	1"
G7	3 3/16"	1½"
G8	3⅛"	1 11/16"
G9	3⅛"	1 7/16"
G10	3⅛"	1½"
G11	3⅛"	1 7/16"

DESIGN - EVERETT
TRACE - AULT
CHECK - WAS
BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
OVERPASS NO. 1

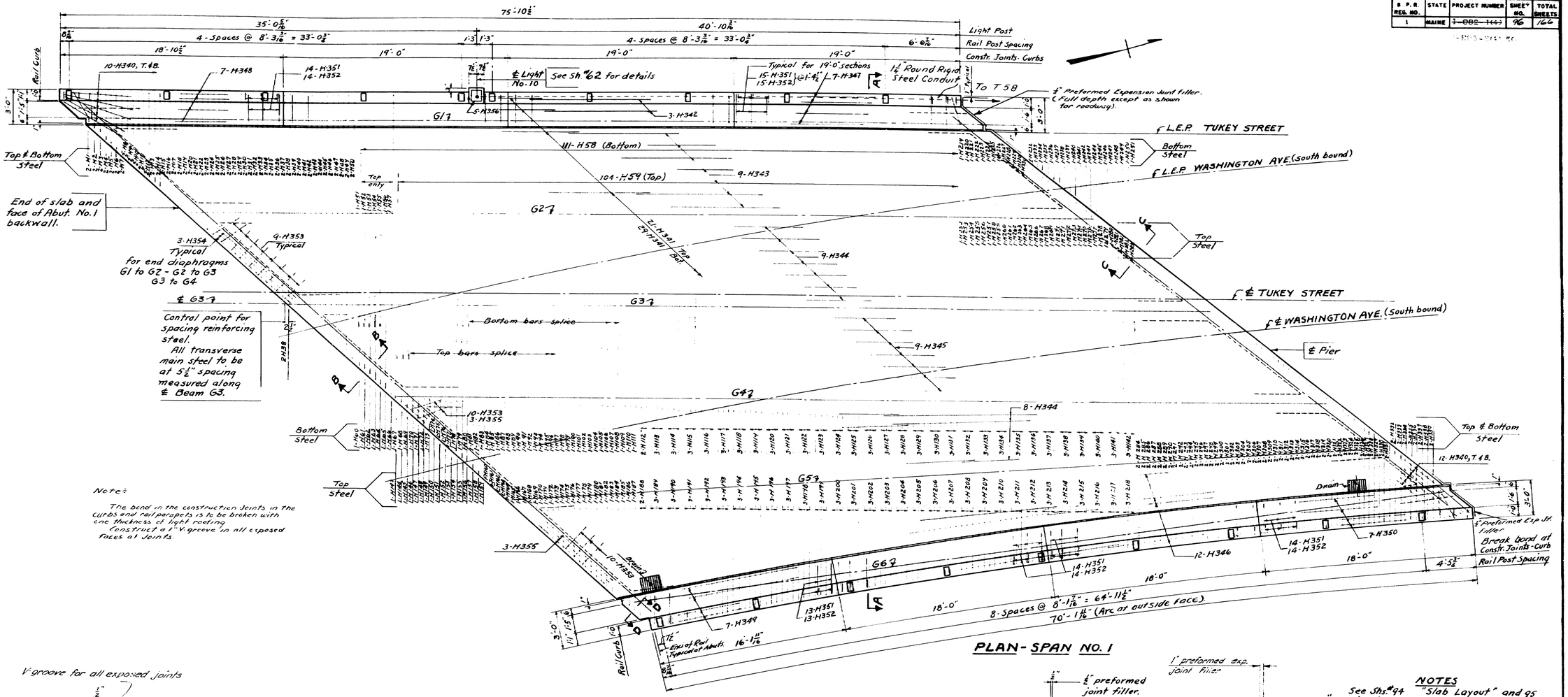
BLOCKING FOR SLAB OVER BEAMS

SHEET 95 OF 166 AUGUSTA, MAINE OCT. 1957

76-95

0 1 2 3 4 5 INCHES

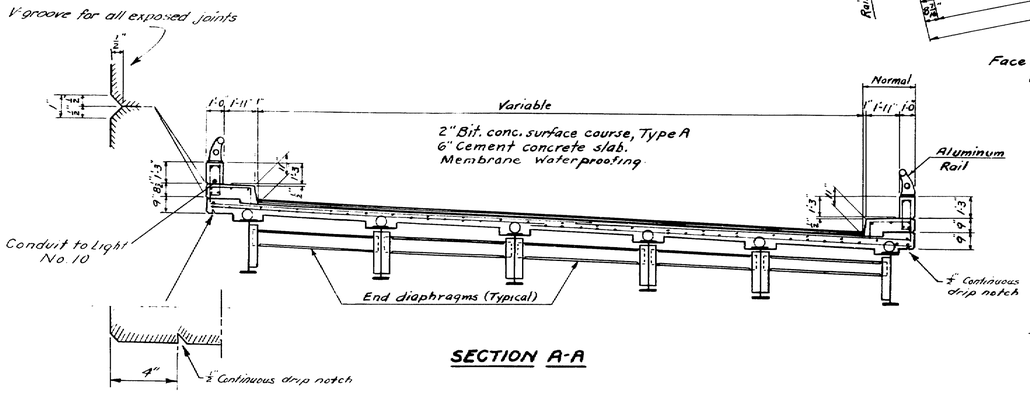
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~7-008-1(4)~~	96	166



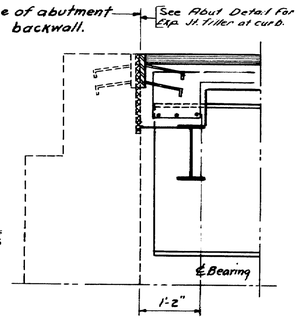
PLAN - SPAN NO. 1

Note:

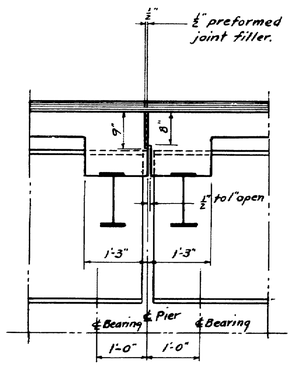
The bend in the construction joints in the curbs and rail parapets is to be broken with one thickness of light roofing.
Construct a 1" V-groove in all exposed faces at joints.



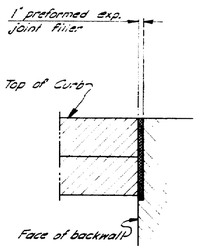
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

NOTES

See Shs. #94 "Slab Layout" and 95 "Blocking for Slab over Beams" for details not shown on this sheet.
See Sh. #98 for "Drain Details"
See Sh. #120 for Aluminum Rail Details.

Concrete for curbs shall not be placed until superstructure slab has been in place for a minimum period of 7 days. During this period, form work may be placed, but hand equipment only, shall be allowed on the slab

DESIGN - HAMILTON
TRACE - WELCH
CHECK - C.S.A.
BRIDGE NO
SURVEY
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

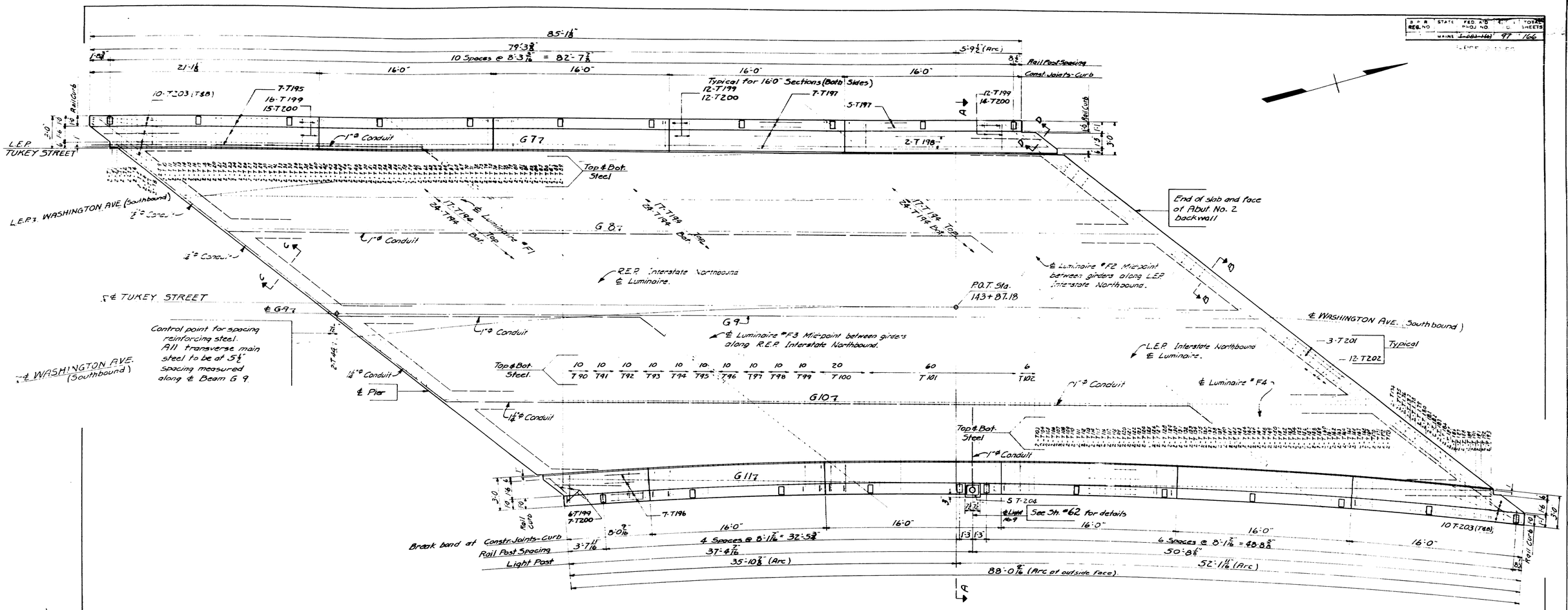
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

OVERPASS NO. 1, SPAN NO. 1
SUPERSTRUCTURE SLAB

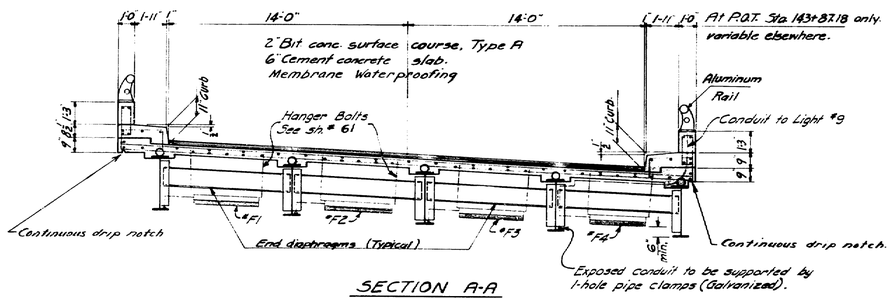
SHEET 96 OF 166 AUGUSTA, MAINE OCT. 1957

76-96

0 1 2 3 4 5 INCHES



PLAN – SPAN No. 2



SECTION A-A

NOTE: Location of Hanger Bolts to be determined by the Engineer, in the field. Bolts are to be in position before concrete slab is placed.
Bottom of Luminaire to be mounted a minimum of 15'0" above ℄ Roadway grade, and 6" Minimum above bottom flange of girder.

– NOTES –

See Sh. #94 #95 Slab Layout and Blocking for Slab over Beams for details not shown on this sheet.
See Sh. #96 for Sections "B-B" "C-C" & "D-D"
See Sh. #120 for Aluminum Rail Details.
See Sh. #96 for notes for Joints.

DESIGN	HAMILTON	BRIDGE NO.	
TRACE	JONES	SURVEY	
CHECK	CSA	PLOT	

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

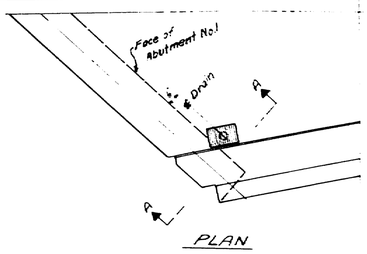
OVERPASS NO. 1 SPAN NO. 2
SUPERSTRUCTURE SLAB

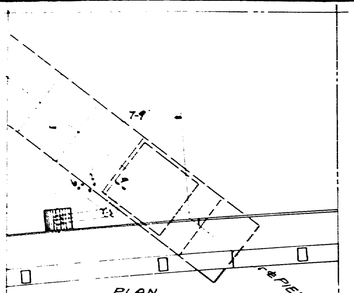
SHEET 97 OF 166 AUGUSTA, MAINE OCT. 1957

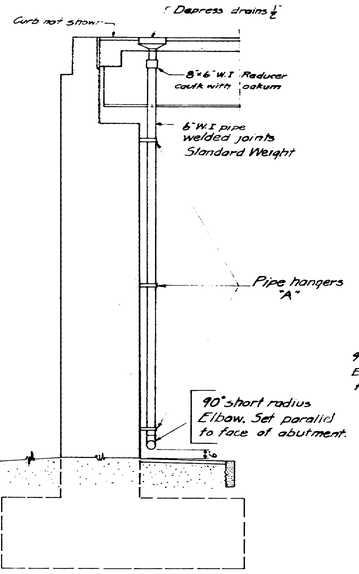
76-97

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-095-1(4)	98	166







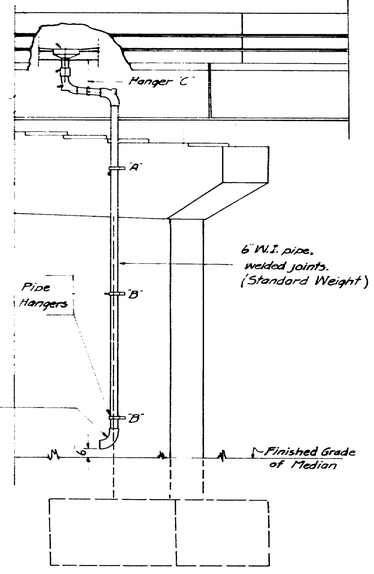
SECTION A-A

DRAINAGE DETAILS AT ABUTMENT NO.1.

Depress drains ½"

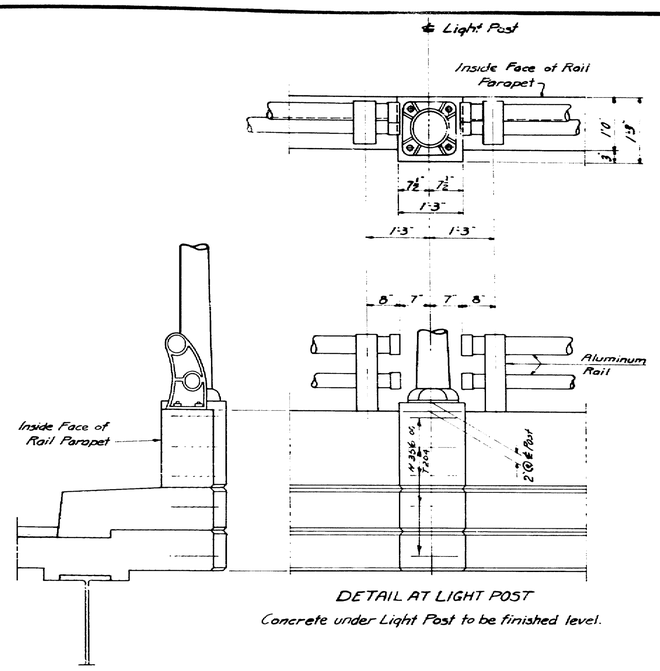
8"x6" W.I. Reducer. caulk with oakum.

90° long radius W.I. Elbows with 2" removable plug (Typical)



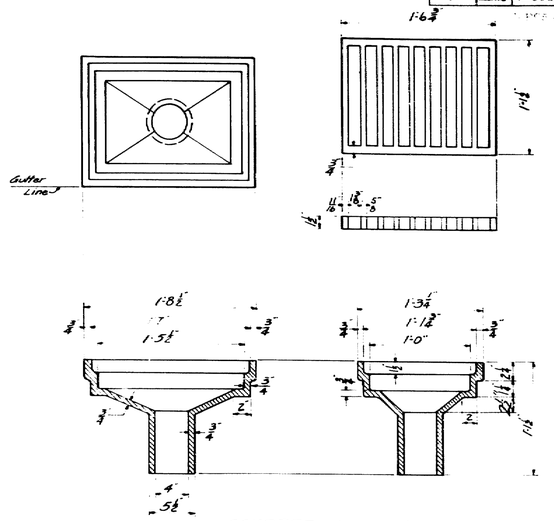
ELEVATION

DRAINAGE DETAILS AT PIER



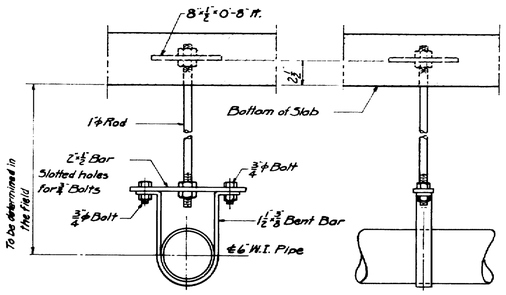
DETAIL AT LIGHT POST

Concrete under Light Post to be finished level.



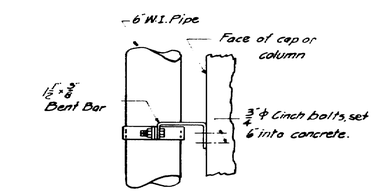
SCUPPER (Cast Iron)

2 Reqd.

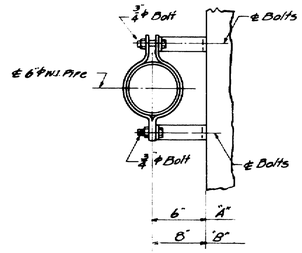


HANGER "C"

1- Pipe hanger "C" req'd. at pier.



ELEVATION



PLAN

PIER — 1- Pipe hanger "A" req'd. (Cap)
2- " " "B" (Column)

ABUTMENT - 3 Pipe hangers "A" " Abutment face.

TRACE	HAMILTON JONES	BRIDGE NO. SURVEY -
CHECK	C.S.H.	- OT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
OVERPASS NO.1
MISCELLANEOUS DETAILS

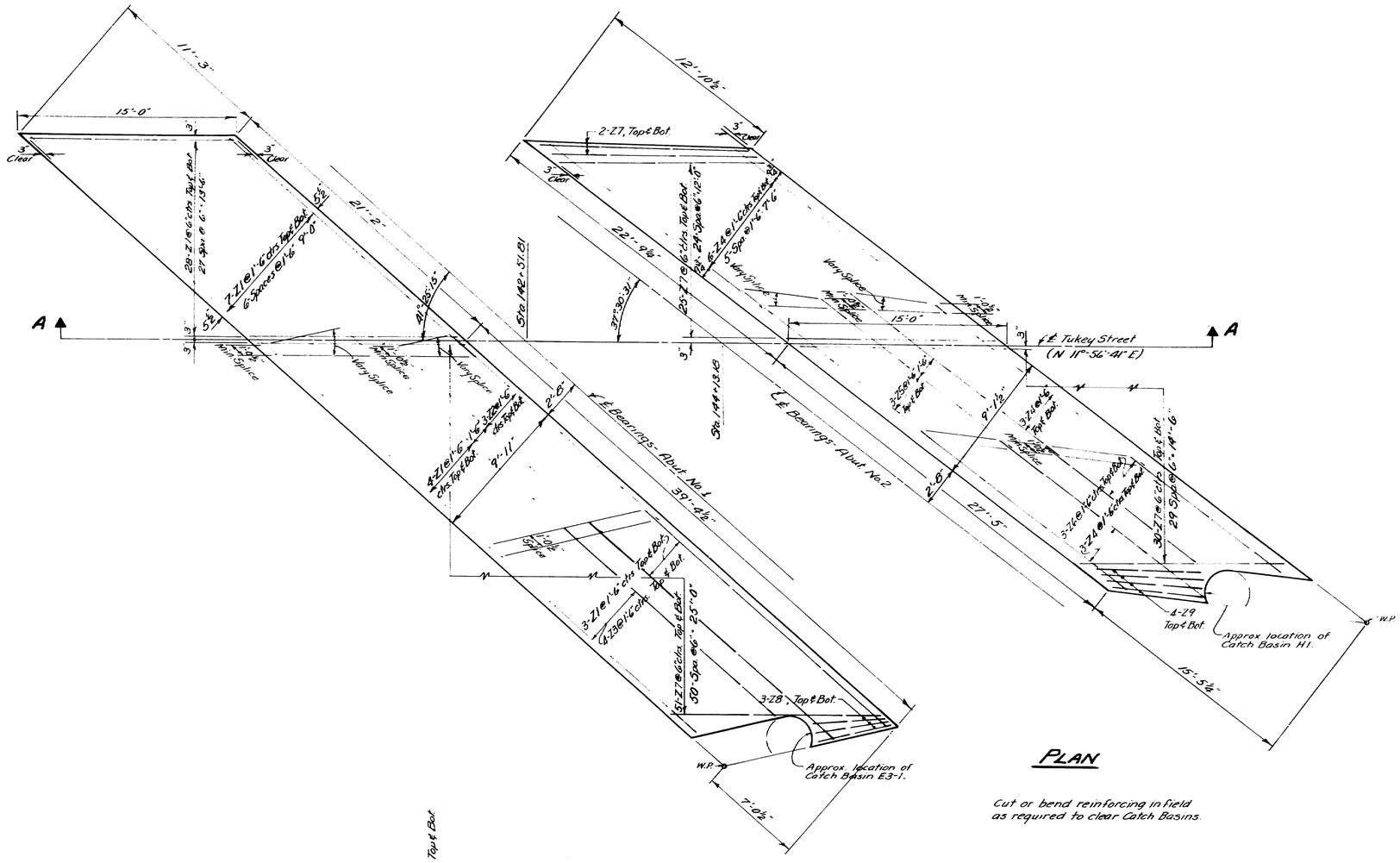
SHEET 98 OF 166 AUGUSTA, MAINE OCT. 1957

76-98

0 1 2 3 4 5 INCHES

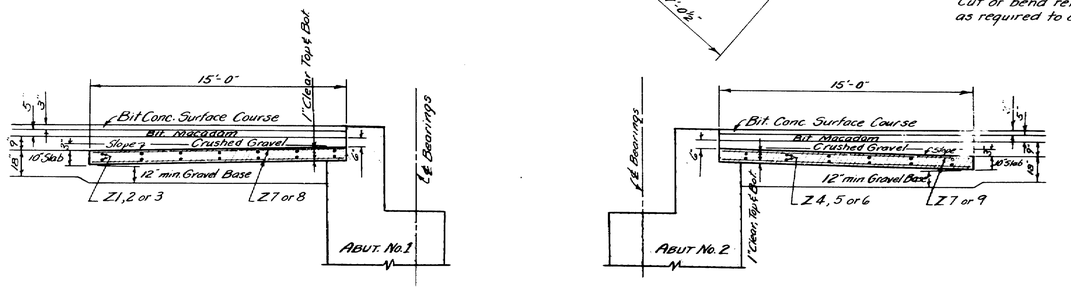
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~I-95E-5(4)50~~	99	166

I-95E-5(4) 50



PLAN

Cut or bend reinforcing in field as required to clear Catch Basins.



SECTION AA

Payment for concrete in approach slabs shall be made under Item 701-40

DESIGN - HARRIS	BRIDGE NO.
TRACE - SIROIS	SURVEY -
CHECK - ~~JWC~~	PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

OVERPASS NO. 1
APPROACH SLABS

SHEET 99 OF 166 AUGUSTA, MAINE OCT. 1957

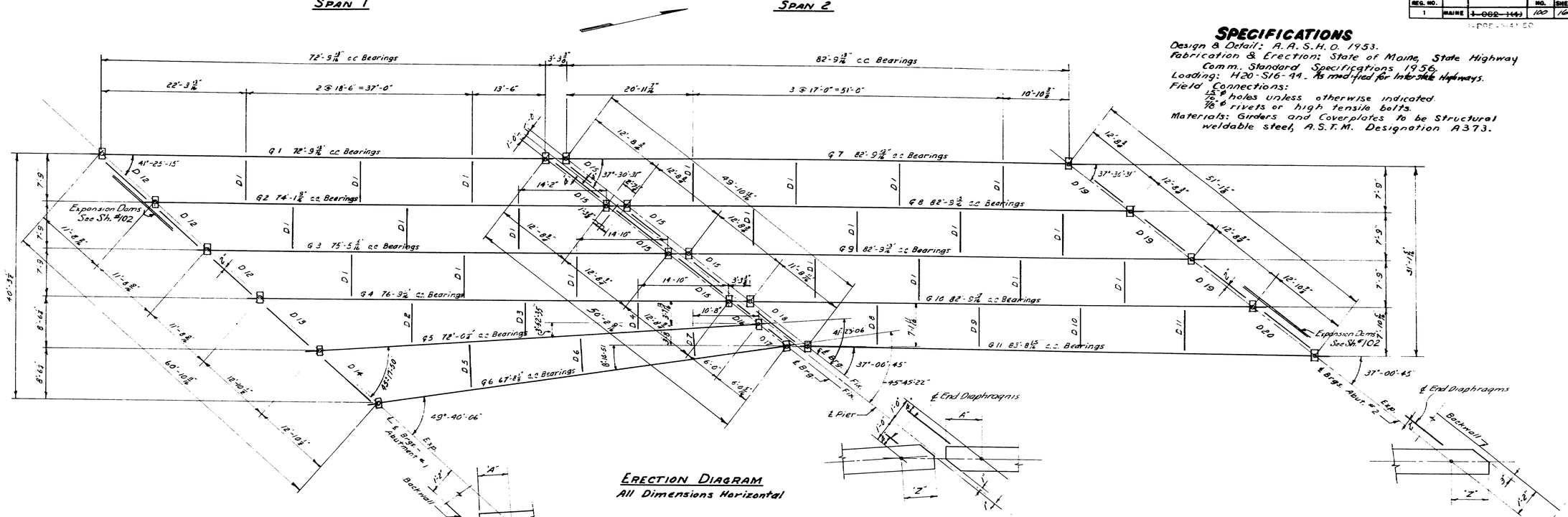
76-99

0 1 2 3 4 5 INCHES

B P R REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~S-062-1(4)~~ I-DRE-1-4(15)50	100	166

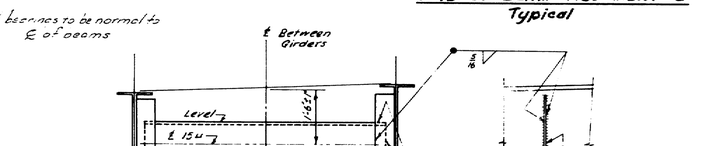
SPECIFICATIONS

Design & Detail: A.A.S.H.O. 1953.
Fabrication & Erection: State of Maine, State Highway Comm. Standard Specifications 1956.
Loading: H20-S16-44. As modified for Interstate Highways.
Field Connections:
13/16" ø holes unless otherwise indicated.
7/8" ø rivets or high tensile bolts.
Materials: Girders and Coverplates to be Structural weldable steel, A.S.T.M. Designation A373.

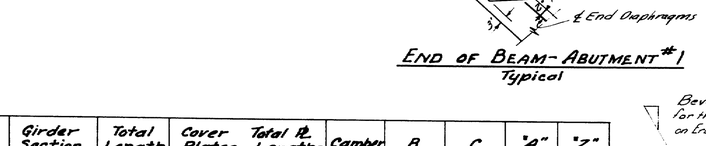


ERECTION DIAGRAM
All Dimensions Horizontal

ENDS OF BEAMS AT PIER
Typical

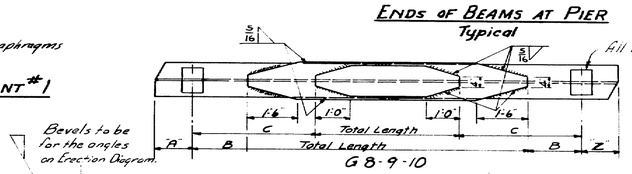


END OF BEAM - ABUTMENT #2
Typical

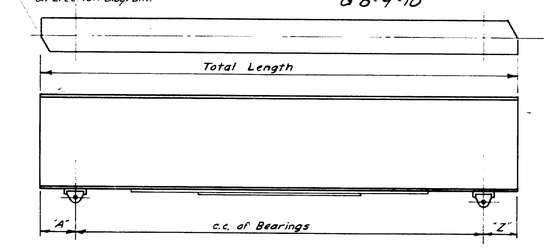


END OF BEAM - ABUTMENT #1
Typical

Span	Girder Mark	c.c. of Bearings	Girder Section	Total Length	Cover Plates	Total ℔ Lengths	Camber	B	C	"A"	"Z"
1	G1	72'-9 13/16"	36 WF 150	75'-8 1/2"	10" x 1	x 52'-0"	3"	10'-4 29/32"	20'-10 29/32"	1'-4 5/8"	1'-6 1/16"
					9" x 1/2	x 31'-0"					
	G2	74'-1 9/16"	36 WF 170	77'-0 1/4"	10" x 1	x 54'-0"	3"	10'-6 25/32"	20'-0 25/32"	1'-4 5/8"	1'-6 1/16"
					9" x 3/4	x 34'-0"					
	G3	75'-5 7/16"	36 WF 170	78'-4"	11" x 1	x 55'-6"	3"	9'-11 21/32"	19'-11 21/32"	1'-4 5/8"	1'-6 1/16"
					9" x 3/4	x 35'-6"					
	G4	76'-9 1/16"	36 WF 170	79'-7 3/4"	10" x 1	x 56'-0"	3 1/4"	10'-4 17/32"	18'-10 17/32"	1'-4 5/8"	1'-6 1/16"
					9" x 3/4	x 39'-0"					
	G5	72'-0 1/4"	36 WF 160	74'-6 3/8"	10" x 3/4	x 51'-0"	3"	10'-6 1/2"	20'-0 1/4"	1'-3 1/2"	1'-4 5/8"
					9" x 5/8	x 32'-0"					
	G6	67'-8 1/8"	36 WF 150	70'-1 15/16"	10" x 1	x 46'-6"	2 1/2"	10'-7 1/4"	——	1'-2 7/16"	1'-3 5/8"
2	G7	82'-9 13/16"	36 WF 194	85'-9 15/16"	11" x 1	x 60'-0"	3 3/4"	11'-4 29/32"	21'-10 29/32"	1'-6 1/16"	1'-6 1/16"
					9 1/2" x 3/4	x 39'-0"					
	G8	82'-9 13/16"	36 WF 194	85'-9 15/16"	13" x 1	x 62'-0"	3 3/4"	10'-4 29/32"	20'-4 29/32"	1'-6 1/16"	1'-6 1/16"
					12" x 3/4	x 42'-0"					
	G9	82'-9 13/16"	36 WF 194	85'-9 15/16"	13" x 1	x 62'-0"	3 3/4"	10'-4 29/32"	20'-4 29/32"	1'-6 1/16"	1'-6 1/16"
					12" x 3/4	x 42'-0"					
	G10	82'-9 13/16"	36 WF 194	85'-9 15/16"	13" x 1	x 62'-0"	3 3/4"	10'-4 29/32"	20'-4 29/32"	1'-6 1/16"	1'-6 1/16"
					12" x 3/4	x 42'-0"					
	G11	83'-8 15/16"	36 WF 194	86'-9 7/16"	11" x 1	x 59'-8"	3 3/4"	12'-4 15/16"	22'-10 15/32"	1'-6 1/4"	1'-6 1/4"
					9 1/2" x 5/8	x 38'-0"					



G 8-9-10



TYPICAL GIRDER & COVER PLATE DETAIL
G1-2-3-4-5-6-7-11

TYPICAL LOCATION OF DIAPHRAGMS
D1 to D11

TYPICAL LOCATION OF DIAPHRAGMS AT PIER & ABUTMENTS
D12 to D20

Revised 6/16/58 Loading changed from H20-S16-44 to H20-S16-44 As modified for Interstate Highways

DESIGN - EVERETT
TRACE - AULT, DET. - JONES
CHECK - C.S.P.

BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
OVERPASS NO. 1
STEEL DETAILS

SHEET 100 OF 166 AUGUSTA, MAINE OCT. 1957

0 1 2 3 4 5 INCHES

76-100

B. P. R. SEC. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~S-862-144~~	101	166

1-595-214) 50

Symmetrical about ℄ Span

℄ Brg.

Z 3/32 — 17 @ 7½" = 10'-7½" | 18 @ 7½" = 11'-3"

3 Lap | 3 Lap | 3 Lap

23 @ 5½" = 10'-6½" | 23 @ 5½" = 10'-6½"

2 Sp. 1 | 2 Sp. 2 | 1 Sp. 1 | 1 Sp. 3

G1 SPIRALS

3 19/32 — 23 @ 5½" = 10'-6½" | 17 @ 7½" = 10'-7½" | 23 @ 5½" = 10'-6½" | 8 @ 7½" = 5'-0"

4 Studs each per pitch | 2 Studs ea. per pitch

G1 STUDS

1 23/32 — 17 @ 7½" = 10'-7½" | 19 @ 7" = 11'-1"

3 Lap | 3 Lap | 3 Lap

23 @ 5½" = 10'-6½" | 27 @ 5" = 11'-3"

2 Sp. 1 | 2 Sp. 2 | 1 Sp. 4 | 1 Sp. 5

G2 SPIRALS

Z 7/32 — 23 @ 5½" = 10'-6½" | 17 @ 7½" = 10'-7½" | 26 @ 5" = 10'-10" | 9 @ 7" = 5'-3"

4 Studs each per pitch | 2 Studs ea. per pitch

G2 STUDS

Z 11/32 — 17 @ 7½" = 10'-7½" | 21 @ 7" = 12'-3"

2½ Lap | 2½ Lap | 2½ Lap

23 @ 5½" = 10'-6½" | 27 @ 5" = 11'-3"

2 Sp. 1 | 2 Sp. 2 | 1 Sp. 4 | 1 Sp. 6

G3 SPIRALS

Z 27/32 — 23 @ 5½" = 10'-6½" | 17 @ 7½" = 10'-7½" | 27 @ 5" = 11'-3" | 19 @ 7" = 11'-1"

4 Studs each per pitch | 2 Studs ea. per pitch

G3 STUDS

1 15/32 — 17 @ 7½" = 10'-7½" | 22 @ 7" = 12'-10"

3 Lap | 3 Lap | 3 Lap

23 @ 5½" = 10'-6½" | 28 @ 5" = 11'-8"

2 Sp. 1 | 2 Sp. 2 | 1 Sp. 7 | 1 Sp. 8

G4 SPIRAL

1 31/32 — 23 @ 5½" = 10'-6½" | 17 @ 7½" = 10'-7½" | 27 @ 5" = 11'-3" | 21 @ 7" = 12'-3"

4 Studs each per pitch | 2 Studs ea. per pitch

G4 STUDS

3 3/8 — 16 @ 8" = 10'-8" | 16 @ 8" = 10'-8"

3 Lap | 3 Lap | 3 Lap

21 @ 6" = 10'-6" | 23 @ 5½" = 10'-6½"

2 Sp. 9 | 2 Sp. 10 | 1 Sp. 1 | 1 Sp. 10

G5 SPIRALS

1 7/8 — 21 @ 6" = 10'-6" | 15 @ 8" = 10'-0" | 24 @ 5½" = 11'-0" | 7 @ 8" = 4'-8"

4 Studs each per pitch | 2 Studs ea. per pitch

G5 STUDS

3 3/16 — 14 @ 8½" = 9'-11" | 19 @ 7½" = 11'-10½"

3 Lap | 3 Lap | 3 Lap

19 @ 6" = 9'-6" | 19 @ 6" = 9'-6"

2 Sp. 11 | 2 Sp. 12 | 1 Sp. 11 | 1 Sp. 13

G6 SPIRALS

Z 7/16 — 19 @ 6" = 9'-6" | 14 @ 8½" = 9'-11" | 18 @ 6" = 9'-0" | 9 @ 7½" = 5'-7½"

4 Studs each per pitch | 2 Studs ea. per pitch

G6 STUDS

SPAN 1 SHEAR CONNECTORS

Symmetrical about ℄ Span

℄ Brg.

Z 11/32 — 19 @ 6" = 9'-6" | 20 @ 6" = 10'-0"

3 Lap | 3 Lap | 3 Lap | 3 Lap

19 @ 6" = 9'-6" | 22 @ 5" = 9'-2" | 13 @ 8½" = 9'-2½"

2 Sp. 11 | 2 Sp. 14 | 1 Sp. 15 | 1 Sp. 16 | 1 Sp. 17

G7 SPIRALS

Z 11/32 — 19 @ 6" = 9'-6" | 18 @ 6" = 9'-6" | 22 @ 5" = 9'-2" | 18 @ 6" = 9'-0" | 13 @ 8½" = 9'-2

4 Studs each per pitch | 2 Studs each per pitch

G7 STUDS

3 3/32 — 16 @ 7" = 9'-4" | 22 @ 5½" = 10'-1"

3 Lap | 3 Lap | 3 Lap | 3 Lap

23 @ 5" = 9'-7" | 12 @ 9" = 9'-0" | 14 @ 8" = 9'-4"

2 Sp. 18 | 2 Sp. 19 | 2 Sp. 20 | 1 Sp. 21 | 1 Sp. 14

G8-9-10 SPIRALS

Z 19/32 — 23 @ 5" = 9'-7" | 15 @ 7½" = 9'-9" | 12 @ 9" = 9'-0" | 21 @ 5½" = 9'-7½" | 14 @ 8" = 9'-4"

4 Studs each per pitch | 2 Studs each per pitch

G8-9-10 STUDS.

Z 17/32 — 12 @ 9" = 9'-0" | 16 @ 7½" = 10'-0"

3 Lap | 3 Lap | 3 Lap | 3 Lap

16 @ 7½" = 10'-0" | 19 @ 6" = 9'-6" | 11 @ 10" = 9'-2"

2 Sp. 22 | 2 Sp. 20 | 1 Sp. 11 | 1 Sp. 22 | 1 Sp. 23

G11 SPIRALS

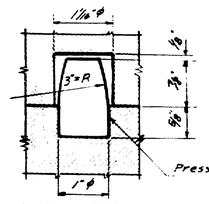
Z 1/32 — 15 @ 7½" = 9'-4½" | 12 @ 9" = 9'-0" | 19 @ 6" = 9'-6" | 16 @ 7½" = 10'-0" | 5 @ 10" = 4'-2"

4 Studs each per pitch | 2 Studs each per pitch

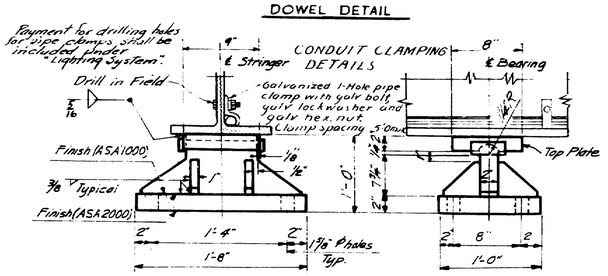
G11 STUDS

SPAN 2 SHEAR CONNECTORS.

SPIRAL TABLE				
MARK	NO.	SPACES	PITCH	LENGTH
Sp1	20	23	5½"	10'-6½"
Sp2	16	17	7½"	10'-7½"
Sp3	1	15	7½"	11'-3"
Sp4	4	27	5"	11'-3"
Sp5	1	19	7"	11'-1"
Sp6	1	21	7"	12'-3"
Sp7	2	28	5"	11'-8"
Sp8	1	22	7"	12'-10"
Sp9	4	21	6"	10'-6"
Sp10	5	16	8"	10'-8"
Sp11	12	19	6"	9'-6"
Sp12	4	14	8½"	9'-11"
Sp13	1	19	7½"	11'-10½"
Sp14	7	14	8"	9'-4"
Sp15	2	22	5"	9'-2"
Sp16	2	20	6"	10'-0"
Sp17	1	13	8½"	9'-2½"
Sp18	12	23	5"	9'-7"
Sp19	12	16	7"	9'-4"
Sp20	16	12	9"	9'-0"
Sp21	6	22	5½"	10'-1"
Sp22	6	16	7½"	10'-0"
Sp23	1	11	10"	9'-2"

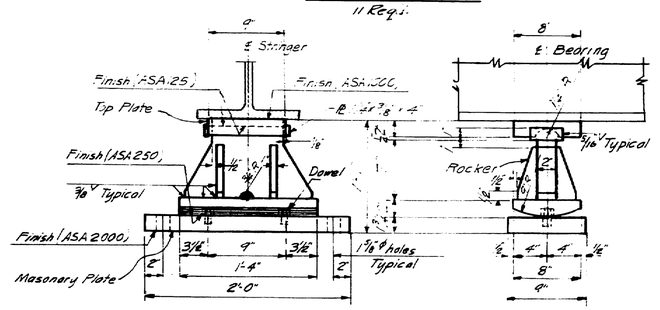


DOWEL DETAIL



FIXED BEARING

11 Req'd.



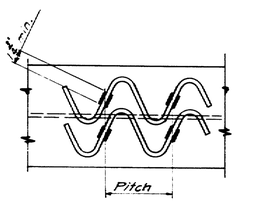
EXPANSION BEARING

11 Req'd.

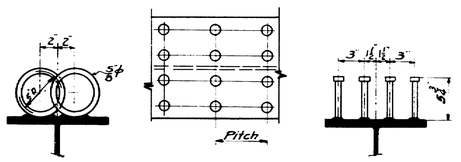
Bearings ✓ ckd.

General Notes

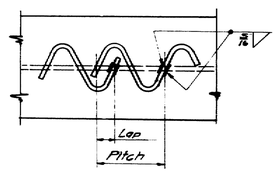
All welding to be 3/8 fillet unless otherwise noted.
Top plate to be field welded to bottom of stringers
1 1/4" ϕ Swedge anchor bolts with 1 hex nut and 3" ϕ x 3/8" washer
Anchor bolts to be set 12" into masonry
At Pier #1, 11 Fixed bearings required
At abutments #1 & 2, 11 expansion bearings required



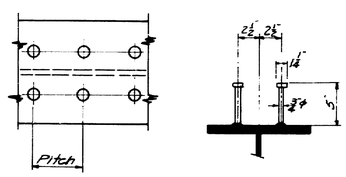
2 Sp.



4 STUDS EACH PER PITCH



15p.



2 STUDS EACH PER PITCH

SHEAR CONNECTORS ✓ W.J.V.

Shear Connectors may be either welded spirals or automatically end welded studs.

# of 3/4" x 5 3/4" studs req'd. 3600
# of 3/4" x 5" studs req'd. 1452

DESIGN - EVERETT TRACE W. HARRIS CHECK - W.J.V. - S.S.H.	BRIDGE NO. - SURVEY - PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
OVERPASS NO. 1

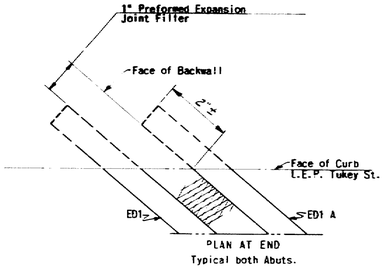
STEEL DETAILS
SHEAR CONNECTORS

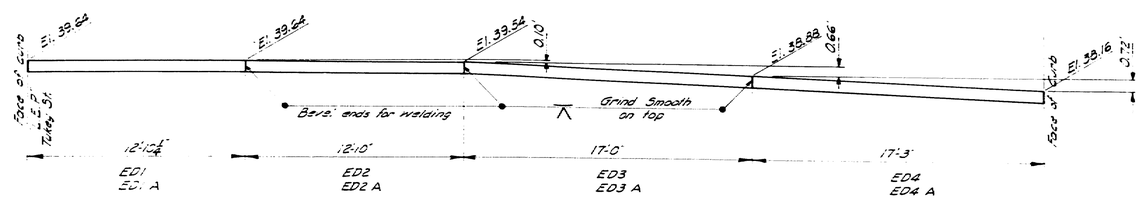
SHEET 101 OF 166 AUGUSTA, MAINE OCT. 1957

76-101

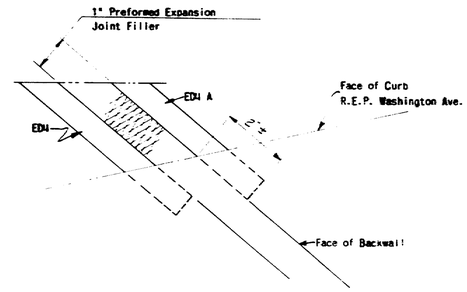
0 1 2 3 4 5 INCHES

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~1-082-144~~	102	166

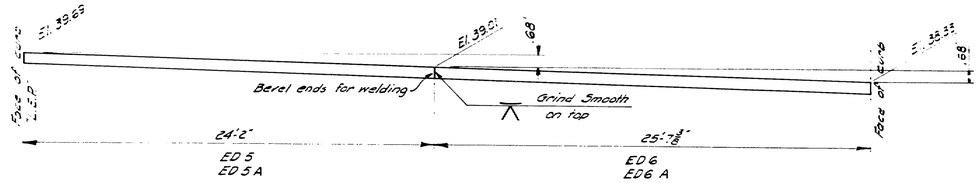




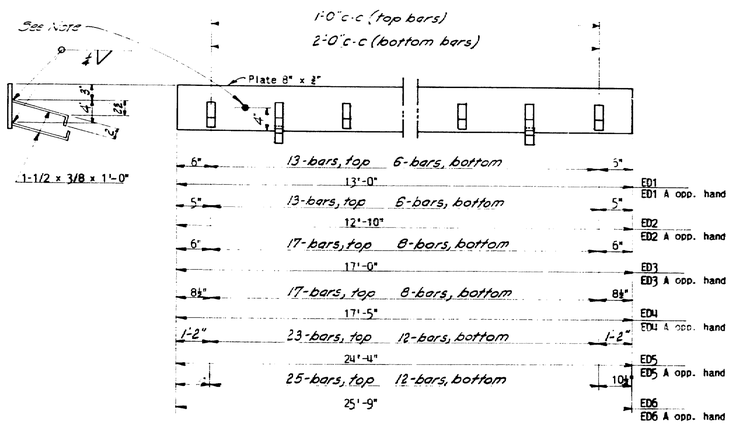
ERECTION ELEVATION AT ABUT. #1



PLAN AT END

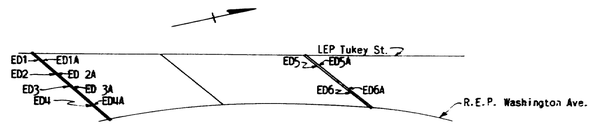


ERECTION ELEVATION AT ABUT. # 2



END DAMS ED1-6 & ED1A - 6A
One (1) each req'd.

NOTE: Holes for ¾" bolts @ 2'-0", to be provided in #'s ED1, 2, 3, 4, 5A, & 6A only.



GENERAL PLAN

DESIGN - ALLEN
TRACE - CLARK
CHECK - [illegible]

BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

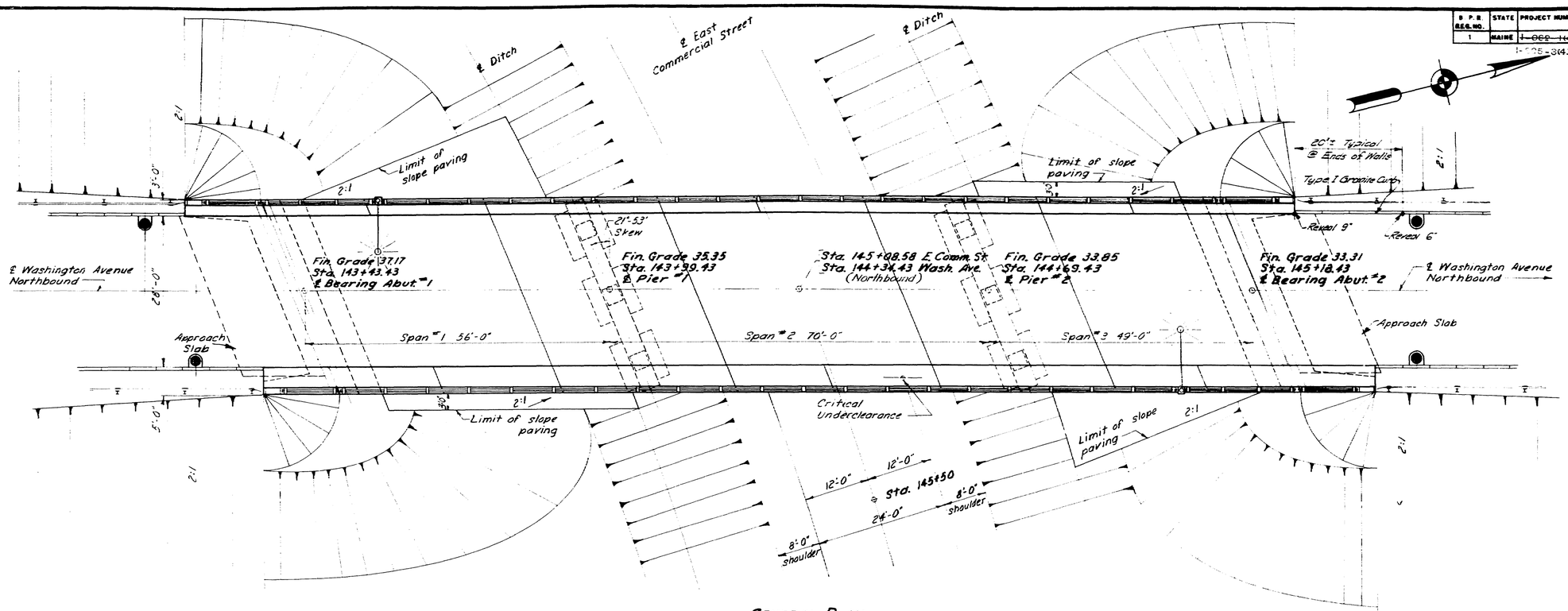
OVERPASS NO. 1
EXPANSION DAMS

SHEET 102 OF 166 AUGUSTA, MAINE OCT. 1957

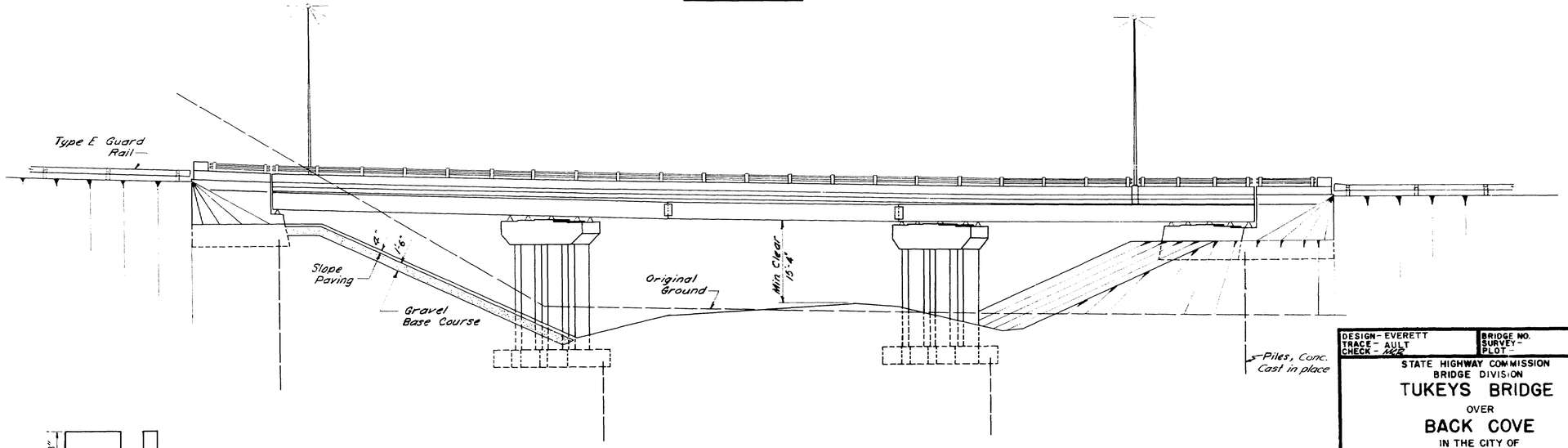
76-102

0 1 2 3 4 5 INCHES

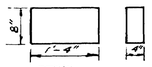
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~I-095-1(43)~~ I-295-3(43) 50	103	166



GENERAL PLAN



GENERAL ELEVATION



DETAIL
SLOPE PAVING BLOCKS

DESIGN - EVERETT
TRACE - AULT
CHECK - [illegible]
BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

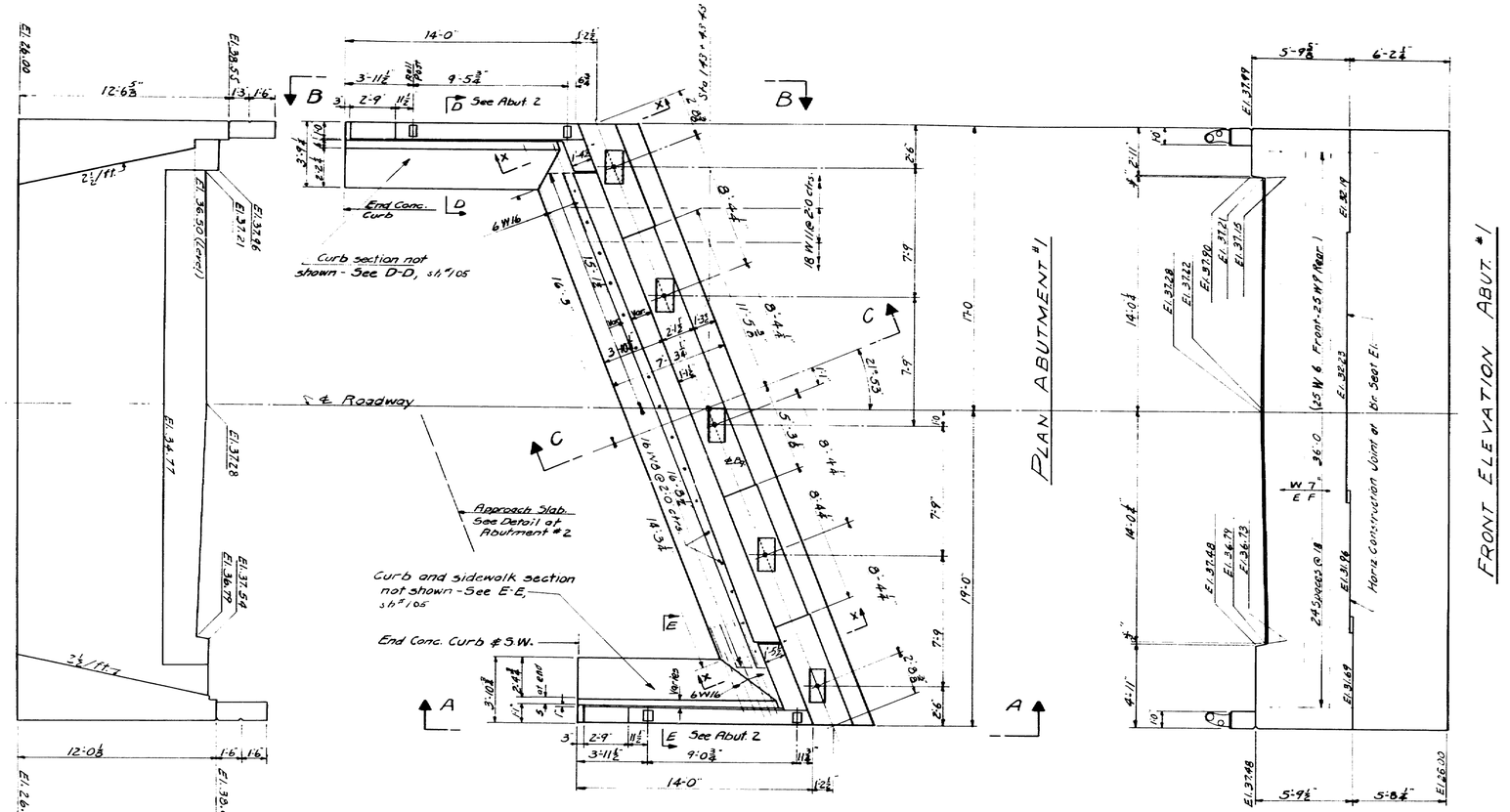
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

OVERPASS NO. 2
GENERAL PLAN & ELEVATION
SHEET 103 OF 166 AUGUSTA, MAINE OCT. 1957

76-103

0 1 2 3 4 5 INCHES

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	[illegible]	104	166

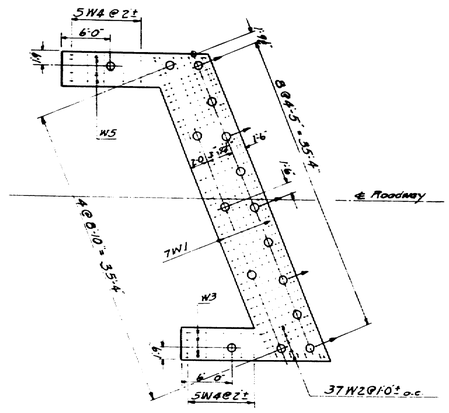


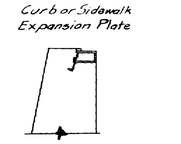
PILE & REINFORCING STEEL LAYOUT ABUT #1

Rotate 180° For Abut. #2.

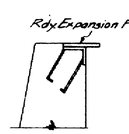
12"ϕ Cast in Place Concrete Piles
Abut #1 16 Piles Est. Length = 25'
Abut #2 16 " " = 45'

Allowable Pile load = 24 Tons
Piles shown thus ○→ to be battered 2½" per foot in the direction shown by arrow.



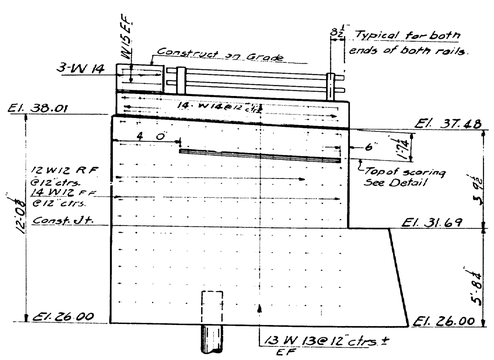


PART SECT. X-X
Typical for Curb & S.W. Sides

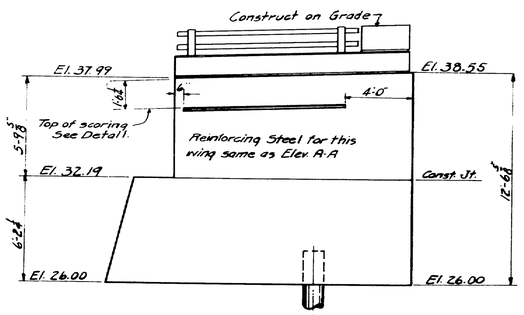


PART SECT. C-C

Note:
Dress shaded area 1" larger all around than size of masonry plate to exact elevation shown.
All chamfers to be ½" and V-grooves to be 1".
Place reinforcing steel in bridge seat to clear anchor bolts.
W-16 Bars to be placed at 1'-6" centers vertically 6" from rear form at intersection of wing and breast wall.
Wing steel to be at 1'-0" centers vertically and horizontally and to have 3" cover.
See Sheet #120 for aluminum rail details.
Backfill to be granular borrow.

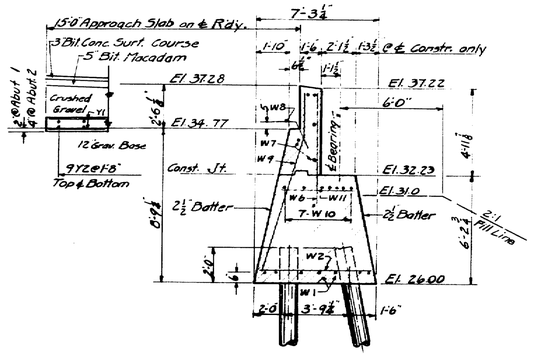


ELEVATION A-A
RF - Rear Face
FF - Front Face
EF - Each Face



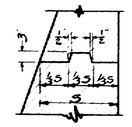
ELEVATION "B-B"

Location of holes thru abutment backwalls for Utilities, shall be determined by the Engineer in the field.

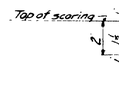


SECTION "C-C"

Dimension thru ℄ Constr.
See Sht #105 for covering const. joint



TYPICAL KEY



SCORING DETAIL

DESIGN - HAMILTON DET. CSA
TRACE - JONES
CHECK - [illegible]
BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

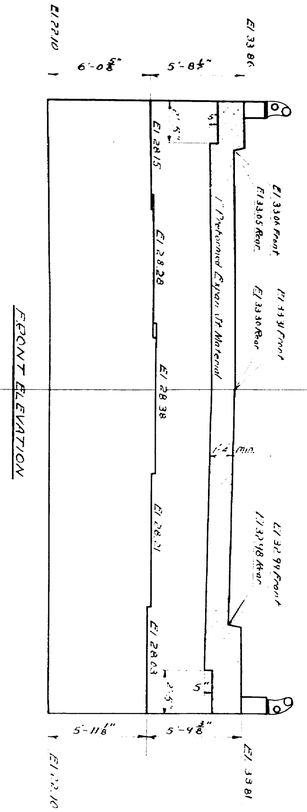
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

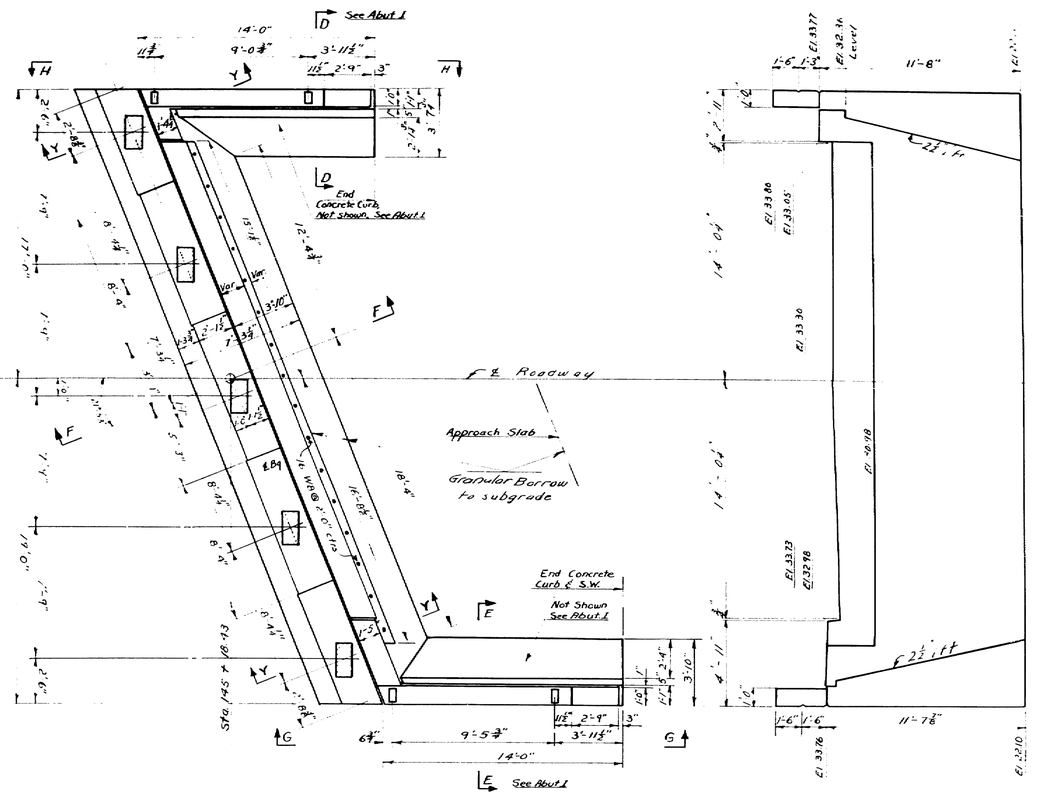
OVERPASS NO. 2
ABUTMENT NO. 1
SHEET 104 OF 166 AUGUSTA, MAINE OCT. 1957

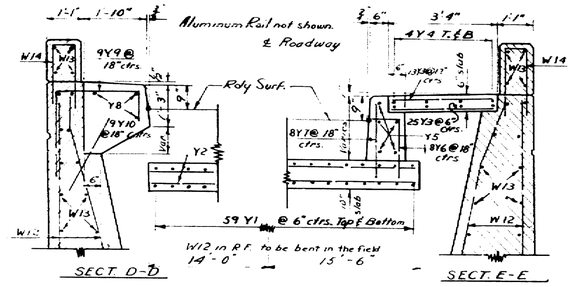
76-104

0 1 2 3 4 5 INCHES

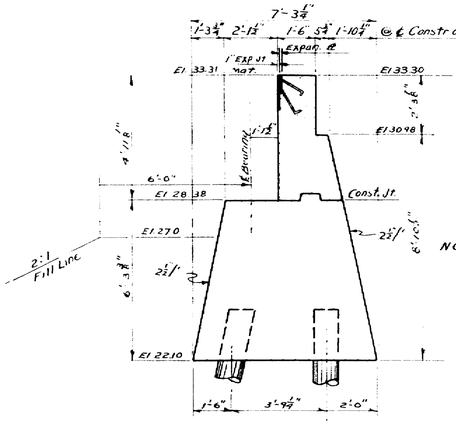
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~F-019-1 (4)~~	105	166





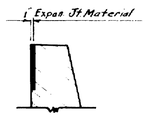


Payment for concrete in Approach Slabs, sidewalk slab and sidewalk curb to be made under Item 701-40

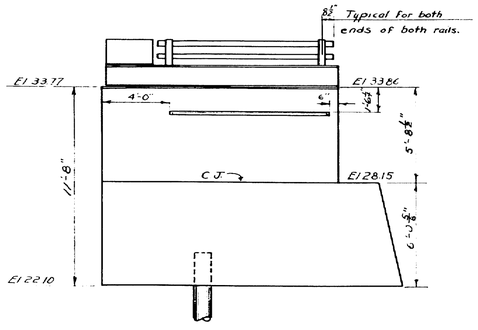


NOTE: Cover back of construction joints with 2 layers of heavy roofing 10" wide bonded together and to concrete with a suitable grade of roofing cement. Recess area to be covered ℄

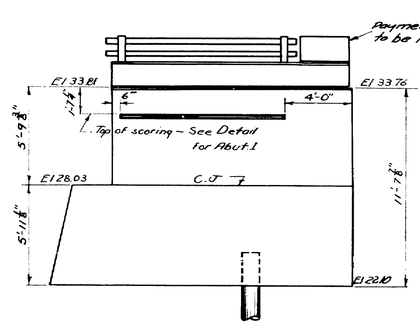
SECT. F-F



PART SECT Y-Y
Typical for Curb & S.W. Sides.



ELEVATION H-H



ELEVATION G-G

Fill under abutment to be carried to elevation of bottom of footing before driving piles.

Notes:
Details not shown are the same as for Abut 1.
All reinforcing steel for Abut 2, is the same as for Abut 1.

DESIGN – HAMILTON
TRACE – GARDNER. DET. – C.S.A.
CHECK – MCF
BRIDGE NO.
SURVEY –
PLOT –

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

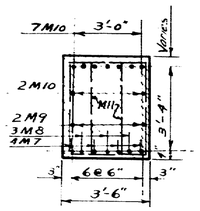
OVERPASS NO. 2
ABUTMENT NO. 2

SHEET 105 OF 166 AUGUSTA, MAINE OCT. 1957

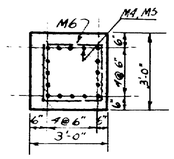
76-105

0 1 2 3 4 5 INCHES

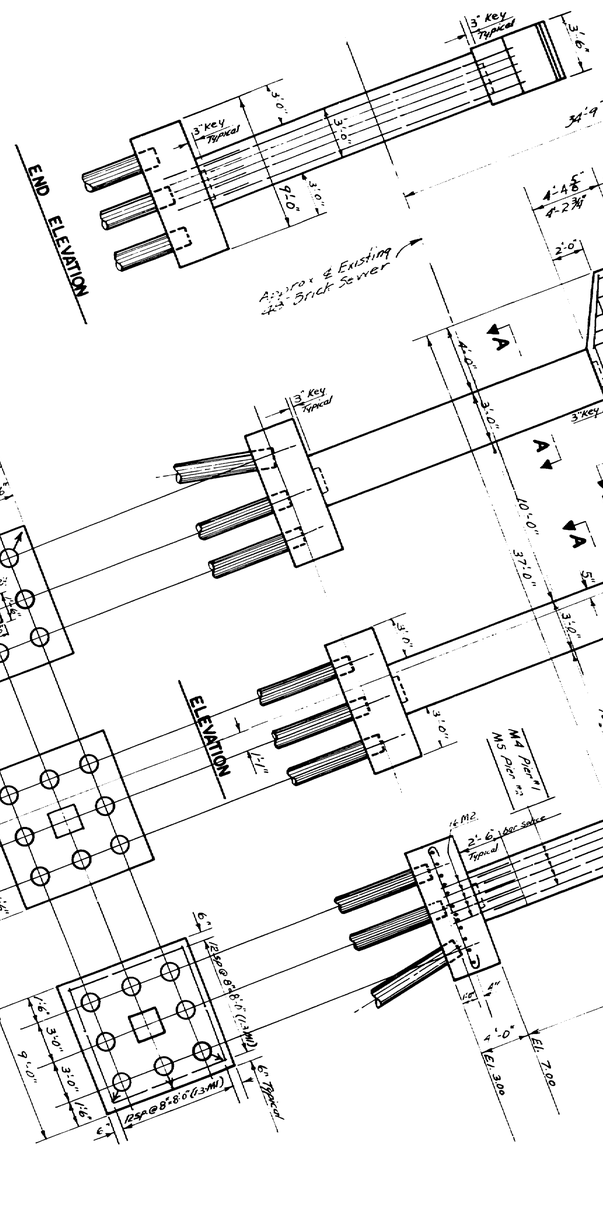
B P R REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~1 OOC 1947~~	106	166

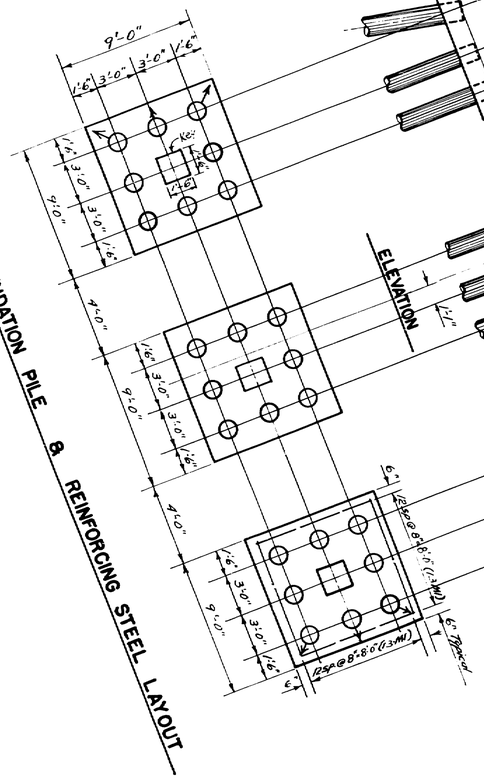


SECTION B-B



SECTION A-A





FOUNDATION PILES

12" diameter Cast in Place Concrete Piles
Pier # 1 - 24 req'd Est. length = 0'
Pier # 2 - 24 req'd Est. length = 20'
Allowable Pile load - 24 Tons
Piles shown thus ⊙ to be battered 2" per foot in the direction indicated by the arrow.

NOTE:

Dress shaded bearing areas to size of masonry plate, plus one inch all around, to exact Bearing Elevations.
Adjust reinforcing to avoid anchor bolts.

DESIGN - HAMILTON DET. C.W.M.
TRACE - GARDNER.
CHECK -

BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

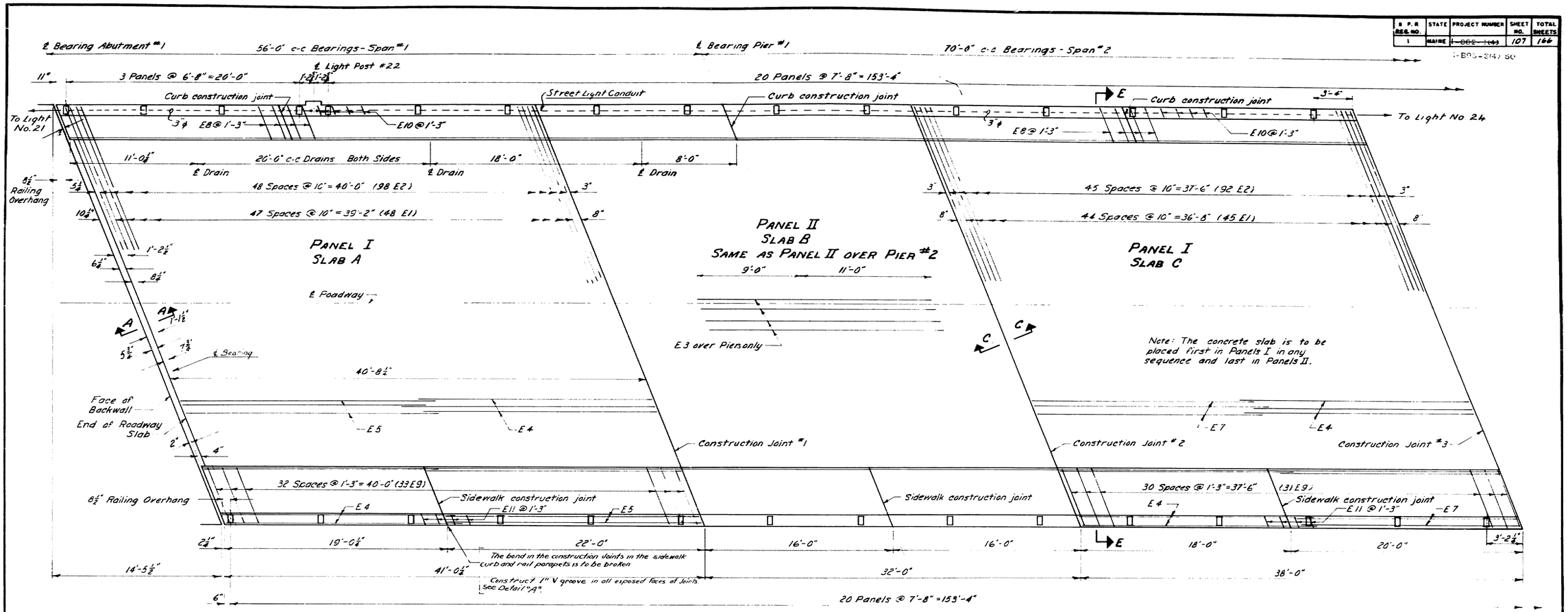
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
OVERPASS NO. 2
PIERS 1 & 2

SHEET 106 OF 166 AUGUSTA, MAINE OCT. 1957

76-106

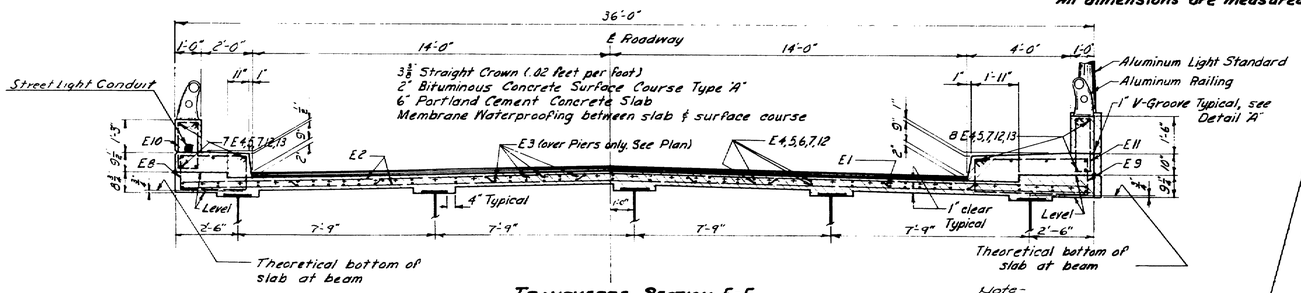
0 1 2 3 4 5 INCHES

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~I-002-1(43)~~ I-BRS-2147(50)	107	166



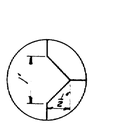
PLAN

All dimensions are measured horizontally.

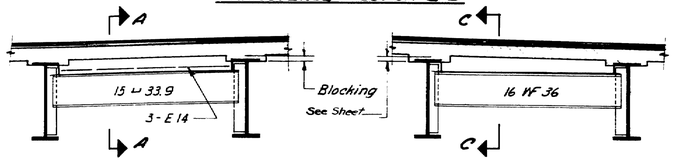


TRANSVERSE SECTION E-E

Note -
Concrete for curb and sidewalk shall not be placed until superstructure slab has been in place for a minimum period of 7 days. During this period form work may be placed, but hand equipment only, shall be allowed on the slab.

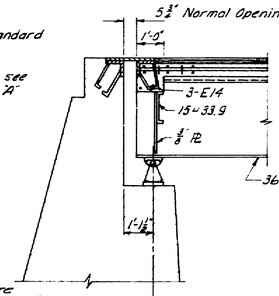


DETAIL "A"
1" V Groove at all exposed joints

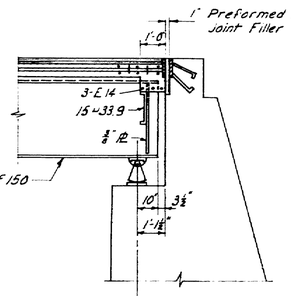


DIAPHRAGM AT ABUTMENTS

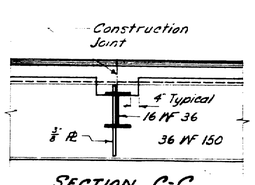
DIAPHRAGM AT CONSTRUCTION JOINTS



SECTION A-A
Expansion Dam at Abutment #1
For details see sheet #110



SECTION B-B
Armored joint at Abutment #2
For details see sheet #110



SECTION C-C
at construction joints

DESIGN - MCDOUGAL, DET - PM
TRACE - AUT
CHECK - [illegible]
BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

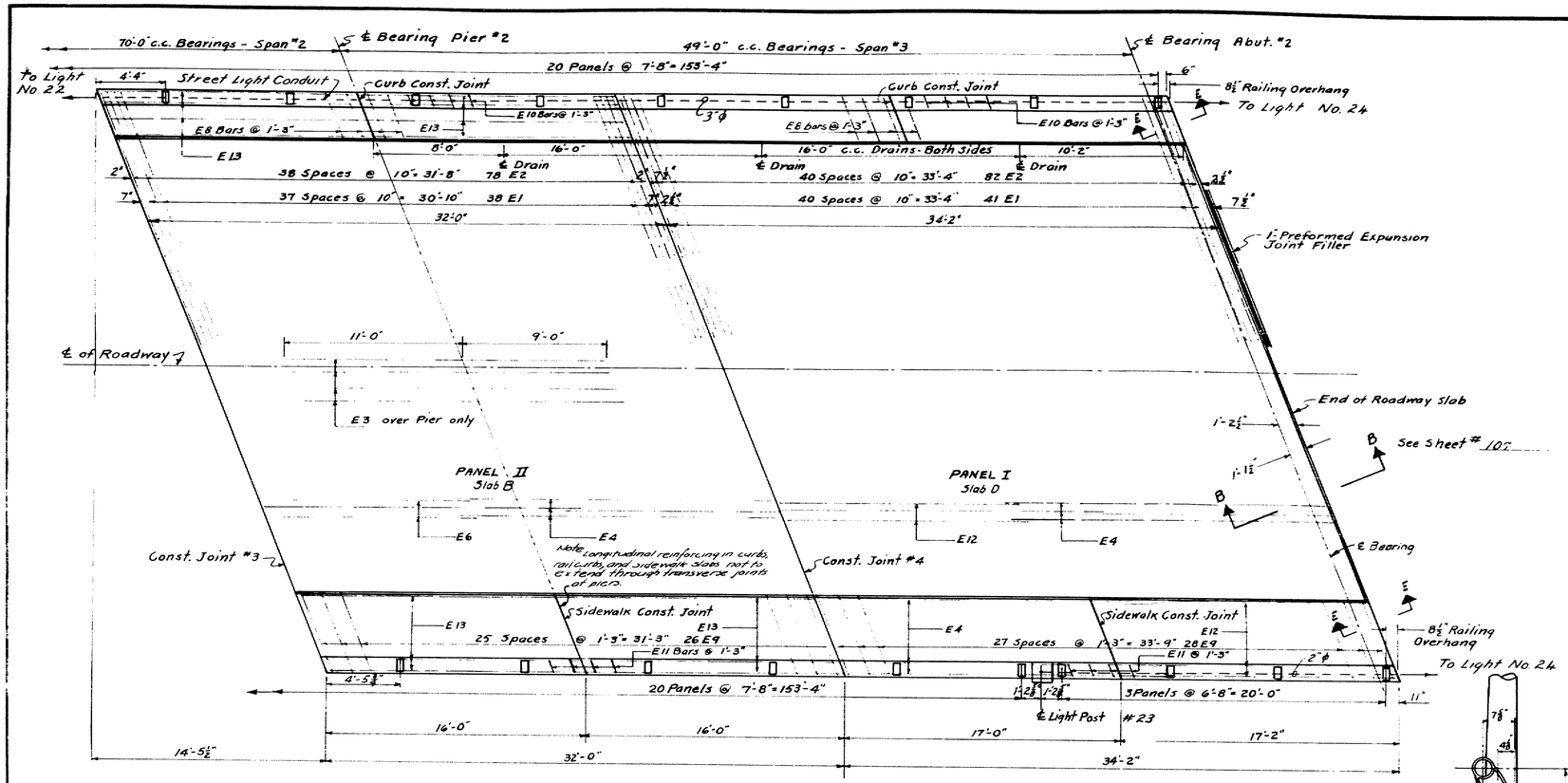
OVERPASS NO. 2
SUPERSTRUCTURE SLAB

SHEET 107 OF 166 AUGUSTA, MAINE OCT. 1957

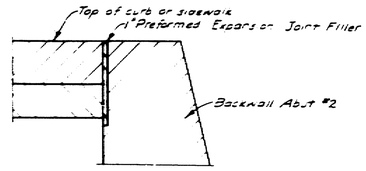
76-107

0 1 2 3 4 5 INCHES

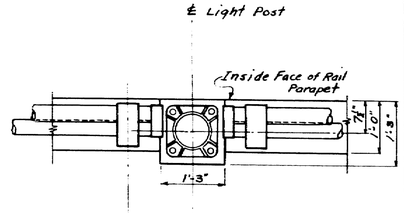
R P & R REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE		108	166

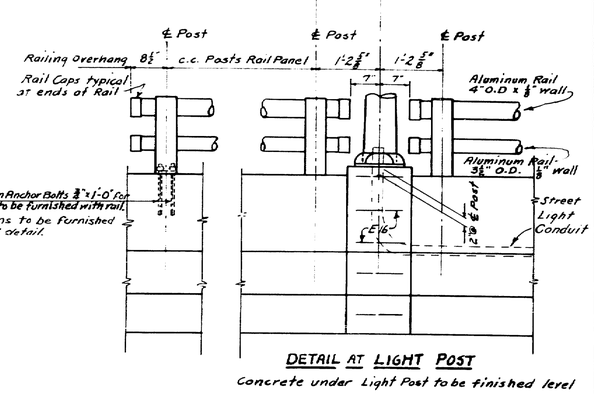


PLAN



SECTION E-E



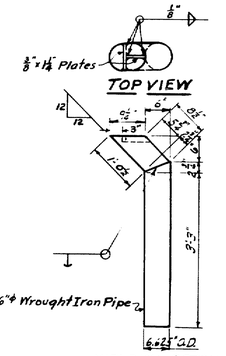


DETAIL AT LIGHT POST

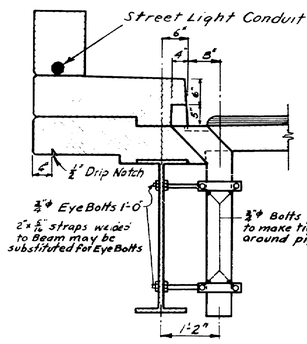
Concrete under Light Post to be finished level

ALUMINUM RAIL TYPICAL DETAILS

Rail dimensions shown are typical except as shown elsewhere. All rail dimensions shown on these plans are horizontal. Rails to be parallel to grade. Substitutions may be made provided they are approved by the Engineer.
For further details of aluminum rail and posts see sh. # 120

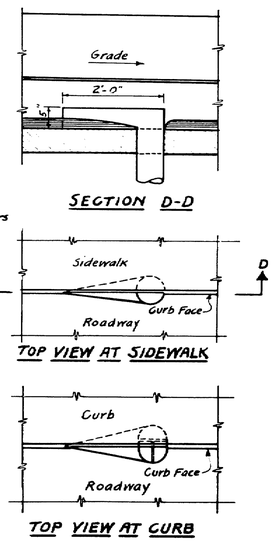


WELDING DETAIL

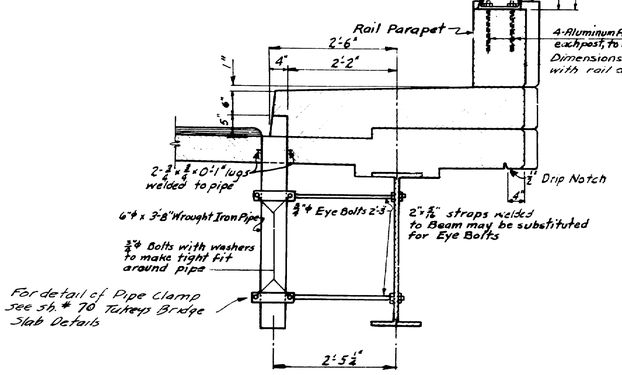


DRAIN DETAIL AT CURB

6-Required



NOTE: Furnishing and Erection of Wrought Iron Pipe Drains to be paid for as Structural Steel under Items 702-105 D & 702-104 D



DRAIN DETAIL AT SIDEWALK

6-Required

DESIGN - McDOUGAL - WENTZEL	BRIDGE NO.
TRACE - WELCH	SURVEY -
CHECK - [illegible]	PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

OVERPASS NO. 2
SUPERSTRUCTURE SLAB

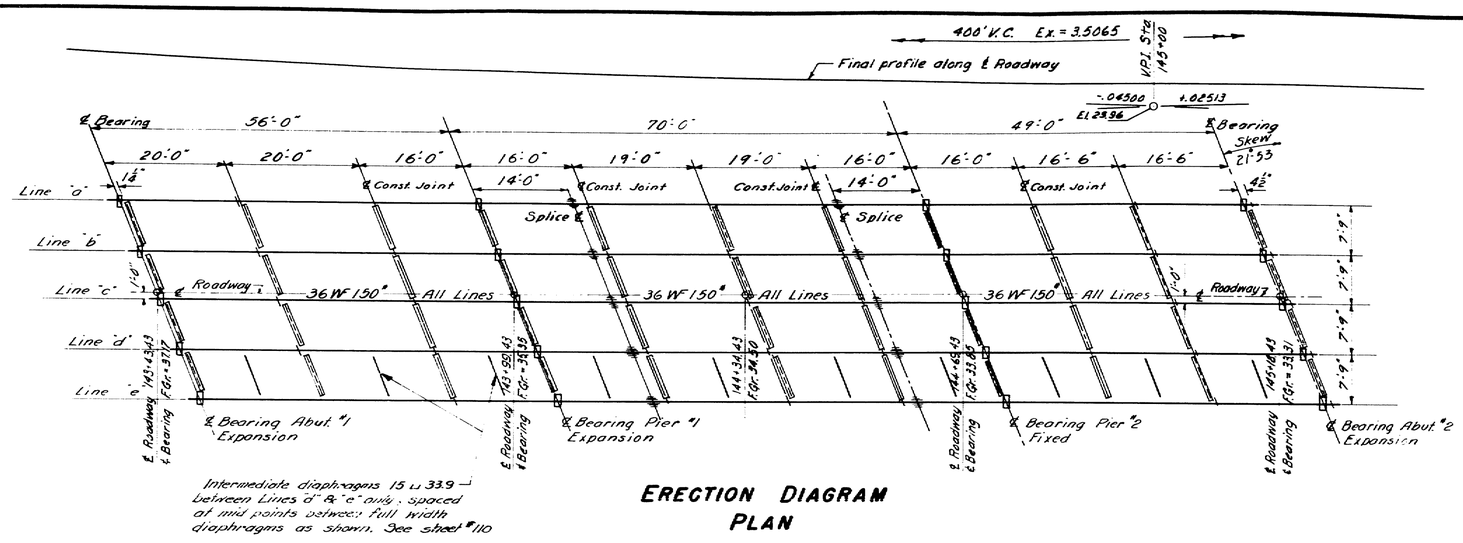
SHEET 108 OF 166 AUGUSTA, MAINE OCT. 1957

76-108

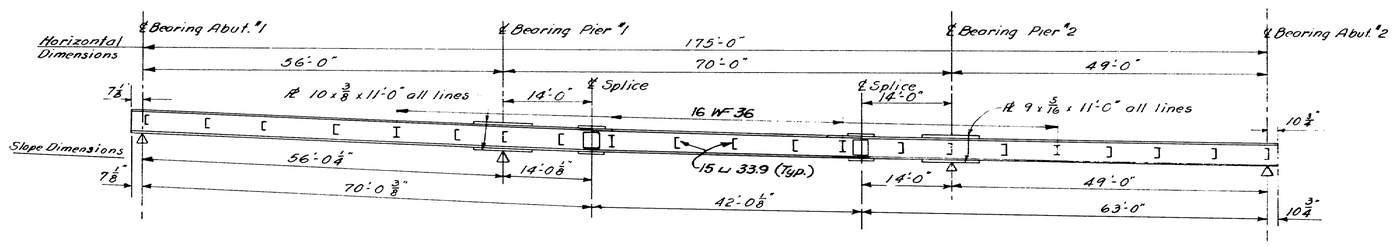
0 1 2 3 4 5 INCHES

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~F-020-1(4)~~	109	166

~~F-020-1(4)~~ 30



ERECTION DIAGRAM
PLAN



ERECTION DIAGRAM
ELEVATION

SPECIFICATIONS

Design & Detail: A.A.S.H.O. 1953.
Fabrication & Erection: State of Maine, State Highway Comm., Standard Specifications 1956.
Loading: H20-S16-44. As modified for Interstate Highways.
Field Connections:
15/16" ℄ holes unless otherwise indicated.
7/8" ℄ rivets or high tensile bolts.
Materials: Girders and Coverplates to be Structural weldable steel, A.S.T.M. Designation A373.

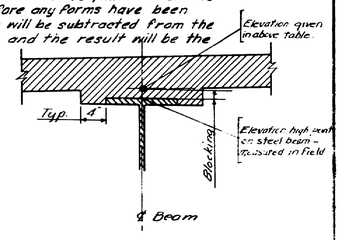
ELEV. TO BOTTOM OF ROADWAY SLAB

Point Dist. from ℄ Bearing Abut. #1

Pt.	Line "a"	Line "b"	Line "c"	Line "d"	Line "e"	
0'	36.43	36.47	36.47	36.20	35.93	℄ Bearing Abut #1
7'	36.17	36.21	36.22	35.95	35.69	
14'	35.93	35.97	35.98	35.72	35.46	
21'	35.69	35.73	35.75	35.48	35.23	
28'	35.46	35.50	35.52	35.26	35.01	
35'	35.21	35.26	35.28	35.04	34.78	
42'	34.99	35.04	35.07	34.81	34.57	
49'	34.76	34.82	34.85	34.60	34.36	
56'	34.56	34.62	34.65	34.41	34.18	℄ Bearing Pier #1
63'	34.37	34.43	34.47	34.23	34.00	
70'	34.20	34.26	34.31	34.06	33.84	
77'	34.02	34.09	34.14	33.91	33.69	
84'	33.87	33.94	33.99	33.76	33.55	
91'	33.70	33.78	33.83	33.61	33.39	
98'	33.55	33.64	33.69	33.47	33.26	
105'	33.39	33.48	33.54	33.32	33.12	
112'	33.25	33.34	33.41	33.19	32.99	
119'	33.11	33.21	33.27	33.06	32.87	
126'	32.99	33.09	33.16	32.95	32.76	℄ Bearing Pier #2
133'	32.87	32.98	33.05	32.85	32.66	
140'	32.78	32.88	33.96	32.76	32.58	
147'	32.69	32.80	32.88	32.69	32.50	
154'	32.61	32.72	32.81	32.62	32.44	
161'	32.53	32.65	32.72	32.55	32.38	
168'	32.46	32.58	32.67	32.49	32.32	
175'	32.39	32.52	32.62	32.45	32.27	℄ Bearing Abut #2

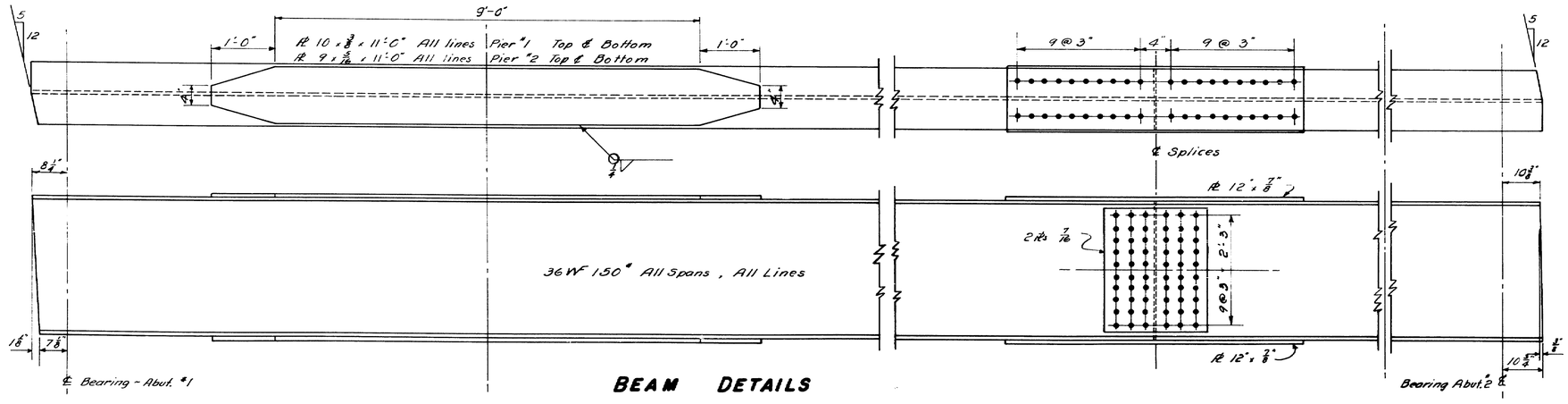
Elevations taken at ℄ of Beam

NOTE: In order to compensate for the vertical curve, dead load deflection and any irregularities in the rolling of the steel, elevations will be taken at the above points after the erection of the steel but before any Forms have been constructed. These elevations will be subtracted from the elevations given in the table and the result will be the blocking. See Blocking Detail.



BLOCKING DETAIL

Blocking is measured from the top of the cover plate or beam which ever the case may be.
Blocking for all beams is:
@ ℄ Bearing Abuts 1 & 2 — 2"
@ ℄ Bearing Pier 1 — 1 5/8"
@ ℄ Bearing Pier 2 — 1 1/4"



BEAM DETAILS

Revised 6/14/58 Loading changed from H20-S16-44 to H20-S16-44 As modified for Interstate Highways

DESIGN - MCDOUGAL	BRIDGE NO
TRACE - SAVAGE	SURVEY
CHECK -	PLOT

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

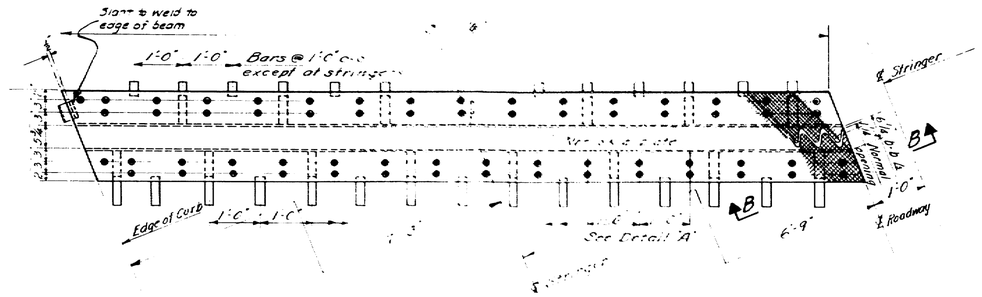
OVERPASS NO. 2
STRUCTURAL STEEL
SHEET 109 OF 166 AUGUSTA, MAINE OCT. 1957.

76-109

0 1 2 3 4 5 INCHES

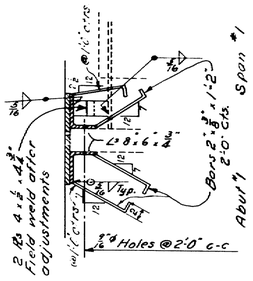
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~F-062-1(4)~~	110	166

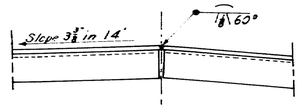
F-076-3(14) 50



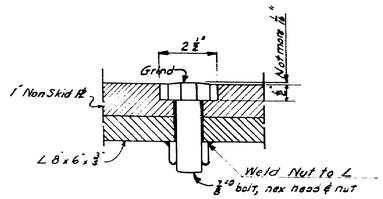
HALF PLAN ROADWAY EXPANSION PLATE ABUT. NO. 1

Opposite Half Similar

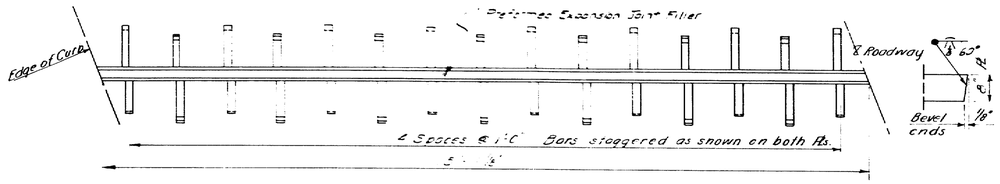




SECTION B—B

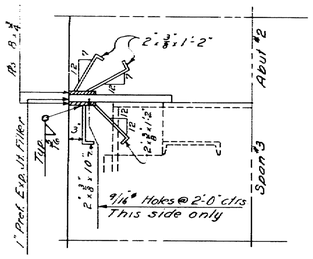


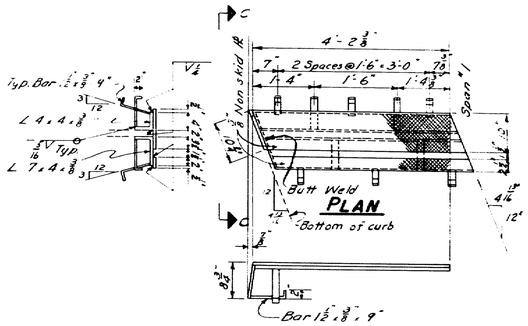
DETAIL A

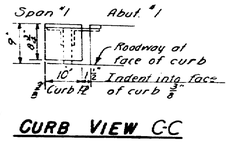


HALF PLAN ROADWAY ARMORED JOINT ABUT. NO. 2

Opposite Half Similar



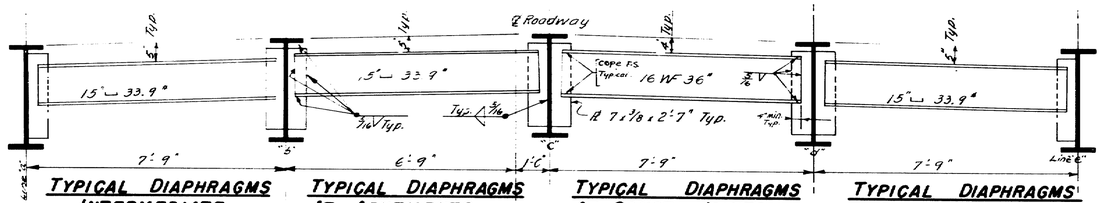




CURB VIEW C-C

ELEVATION

SIDEWALK EXPANSION PLATE ABUT. NO. 1



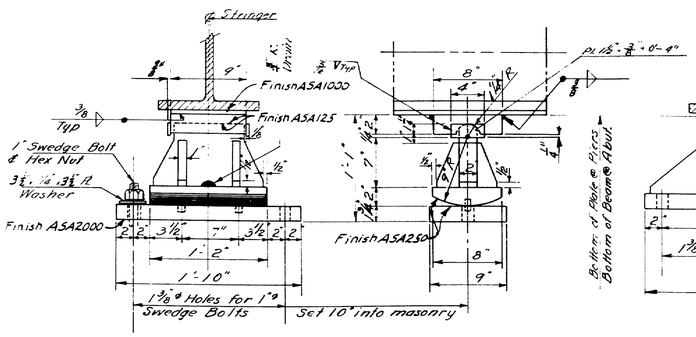
TYPICAL DIAPHRAGMS INTERMEDIATE

TYPICAL DIAPHRAGMS AT ABUTMENTS

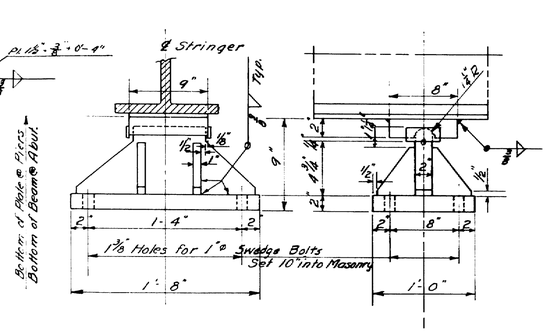
TYPICAL DIAPHRAGMS AT CONST. JOINTS

TYPICAL DIAPHRAGMS INTERMEDIATE

TRANSVERSE SECTION

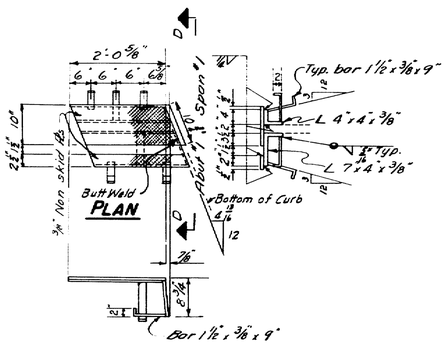


EXPANSION
15 Req'd.

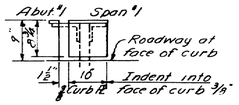


BEARING PEDESTALS

FIXED
5 Req'd.

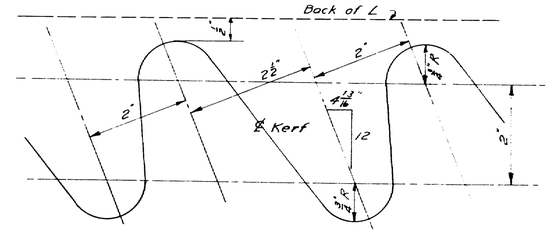


ELEVATION



CURB VIEW D-D

CURB EXPANSION PLATE ABUTMENT NO. 1



CUTTING DIAGRAM

DESIGN - MCDOUGAL
TRACE - SAVAGE
CHECK -
BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
OVERPASS NO. 2
STRUCTURAL STEEL

SHEET 110 OF 166 AUGUSTA, MAINE OCT. 1957.

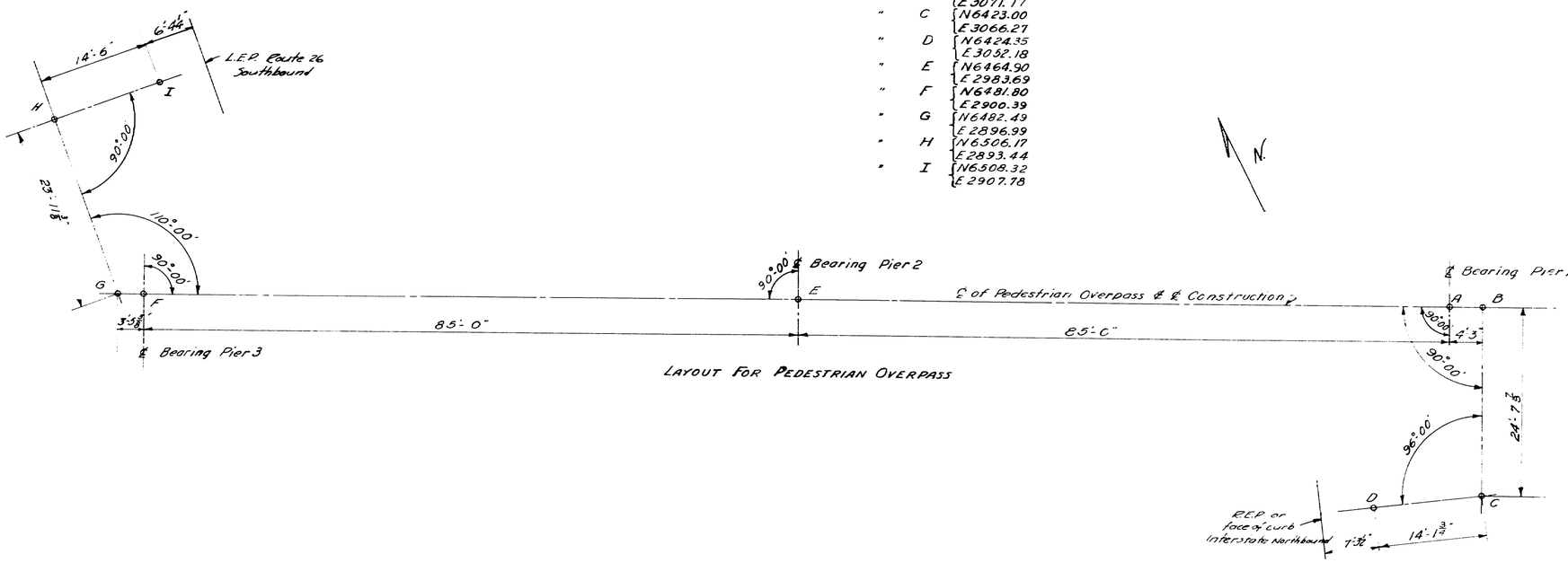
76-110

0 1 2 3 4 5 INCHES

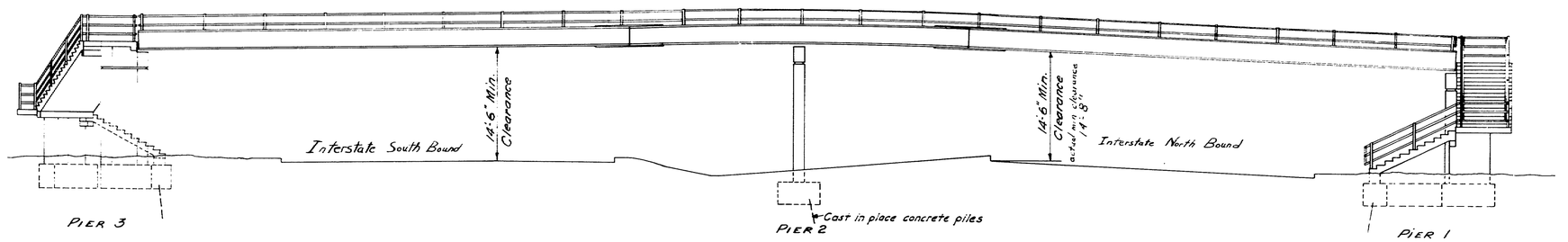
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	S-068-1(4)	111	166

COORDINATES

Point		
A	N6448.00	E3067.00
B	N6447.15	E3071.17
C	N6423.00	E3066.27
D	N6424.35	E3052.18
E	N6464.90	E2983.69
F	N6481.80	E2900.39
G	N6482.49	E2896.99
H	N6506.17	E2893.44
I	N6508.32	E2907.78



LAYOUT FOR PEDESTRIAN OVERPASS



ELEVATION PEDESTRIAN OVERPASS

Note- Payment for concrete in Piers, Columns, Stairs and Slabs to be made under Item 701-35C "Portland Cement Concrete Piers, Pedestrian Overpass"

The entire top surfaces of slabs and steps shall be finished as prescribed in Sect. 701-22 of the Standard Specifications, except that no margins will be provided.

DESIGN- LANGFORD
TRACE- SAVAGE
CHECK- MCR

BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

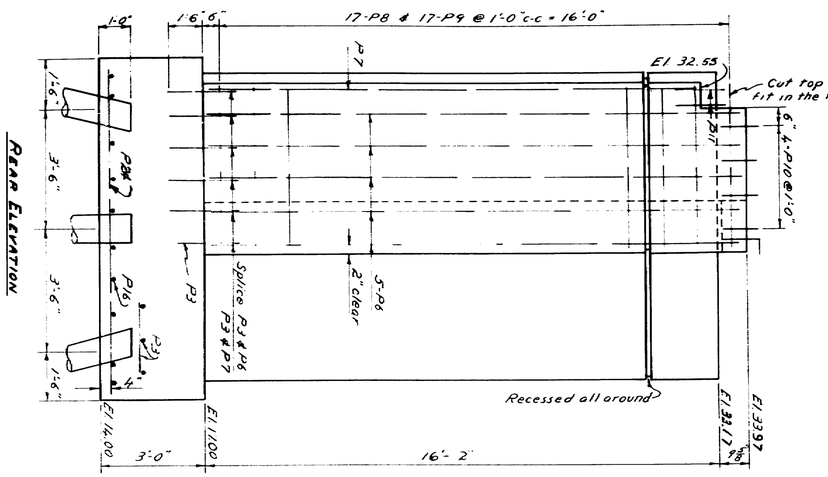
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
PEDESTRIAN OVERPASS
LAYOUT & ELEVATION

SHEET 111 OF 166 AUGUSTA, MAINE OCT. 1957.

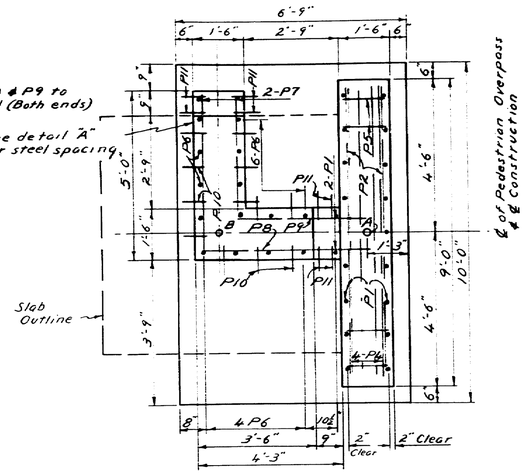
76-111

0 1 2 3 4 5 INCHES

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	3-066 1(4)	112	166

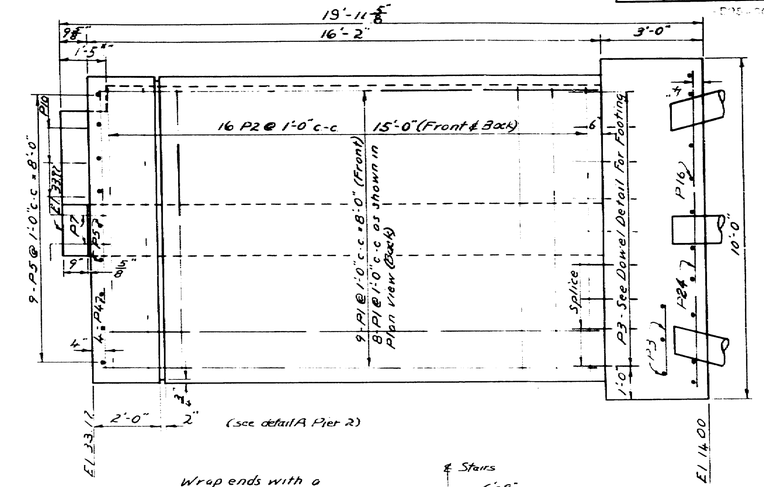


REAR ELEVATION

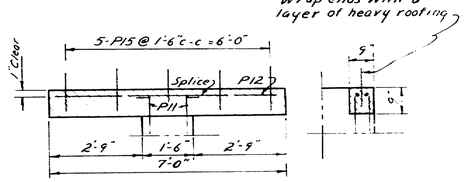


PLAN

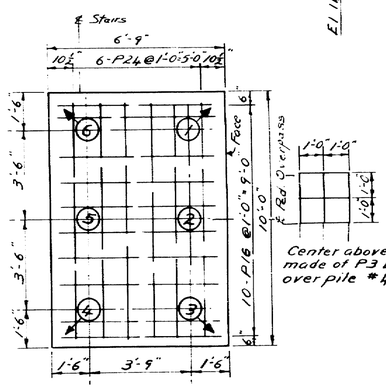
See Detail B For Bearing Area Detail

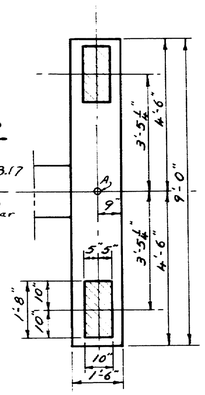


FRONT ELEVATION



DETAIL OF CANTILEVER BEAM



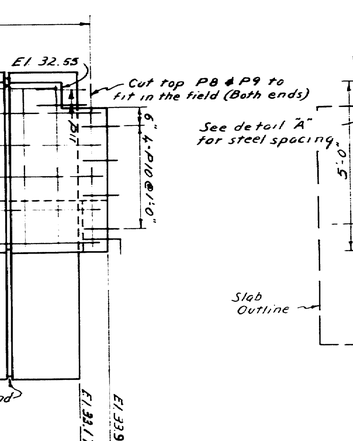


DETAIL B

COORDINATES

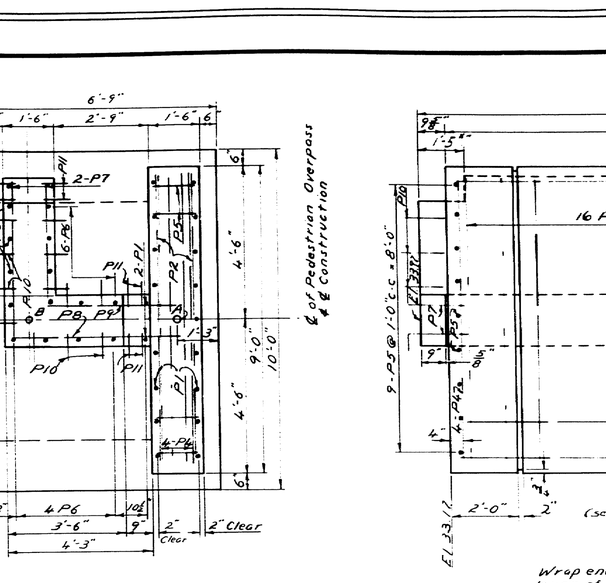
Point A { N 6448.00 / E 3067.00

Point B { N 6447.15 / E 3071.17



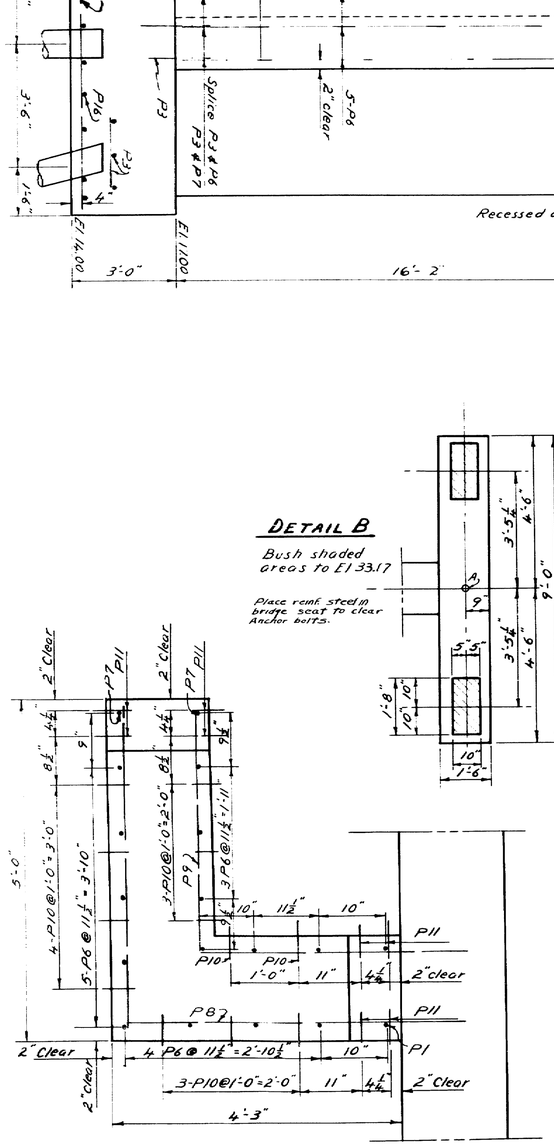
DOWEL PLAN FOR FOOTING

NOTE: All P1, P6 & P7 bars are spliced to the dowels (P3).

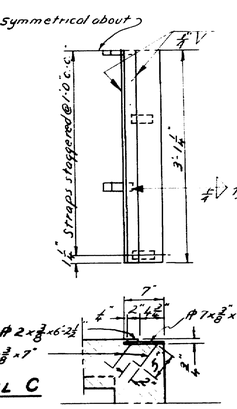


FLOOR SLAB

Note: Floor slab should not be cast until Rail Details have been approved.



DETAIL A



DETAIL C

PILE PLAN

P25 bars can be moved to clear piles.
Batter piles shown - 2" / ft
Use 6-12"ø Cast in Place Conc. Piles. Allowable load 24 tons/pile.
See SH. 14 for details.
Estimated length below cut-off 66'

All exposed edges of concrete to be chamfered ¾" unless otherwise specified.

DESIGN - LANGFORD
TRACE - V. SMITH
CHECK - [illegible]
BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
PEDESTRIAN OVERPASS
PIER I

SHEET 112 OF 166 AUGUSTA, MAINE OCT. 1957

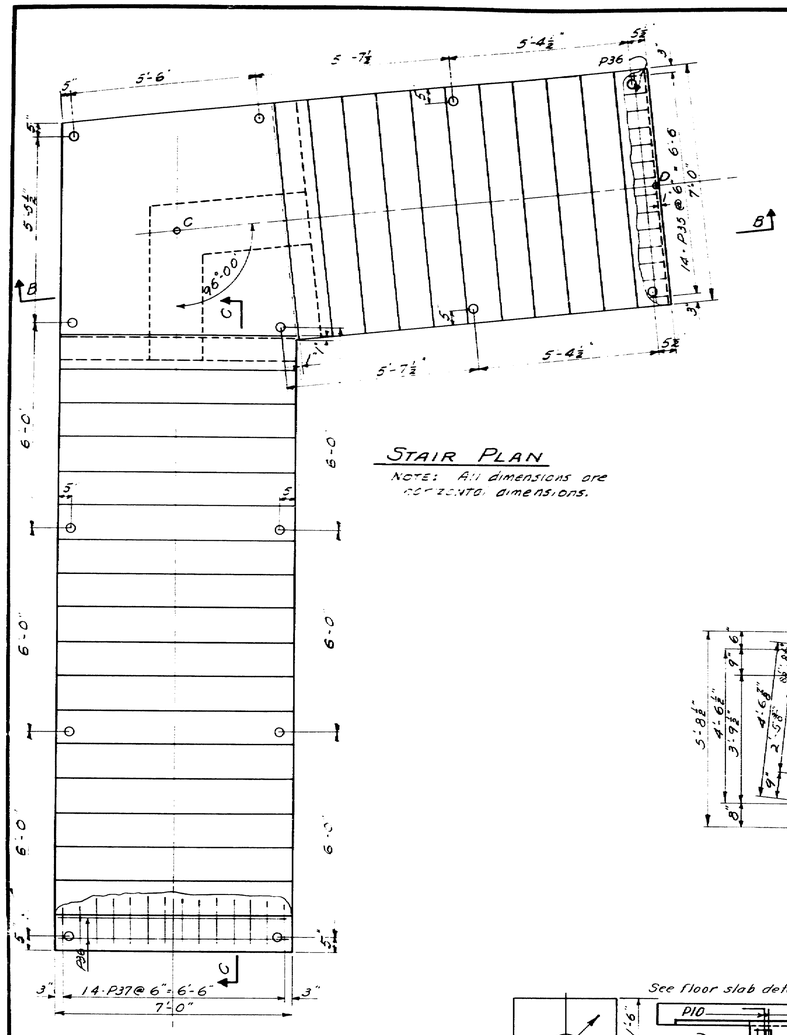
76-112

0 1 2 3 4 5 INCHES

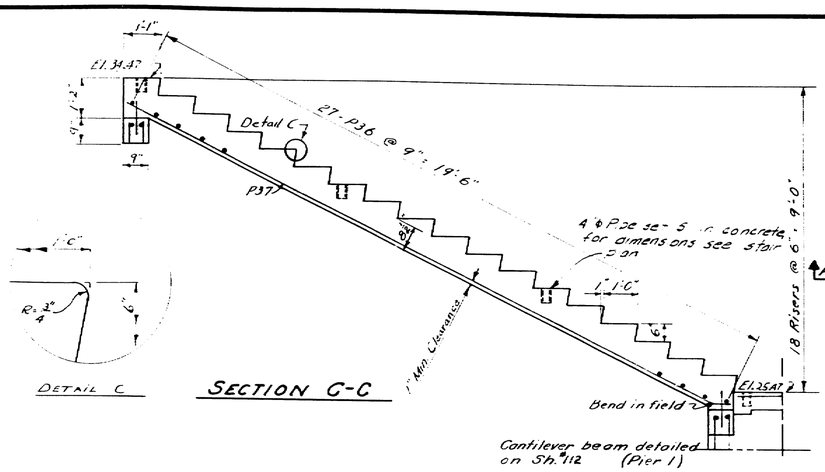
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~1-066-1[illegible]~~	113	166

STAIR PLAN

NOTE: All dimensions are horizontal dimensions.

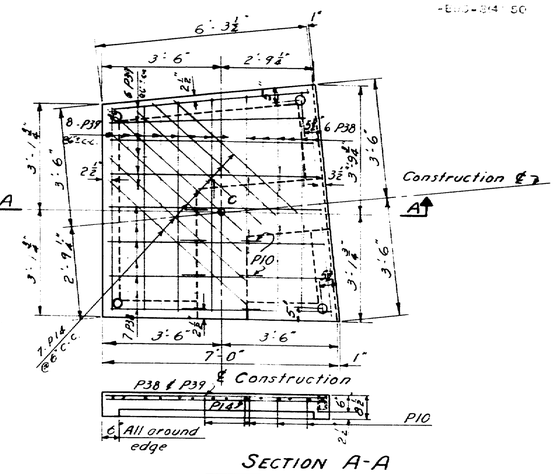


SECTION C-C

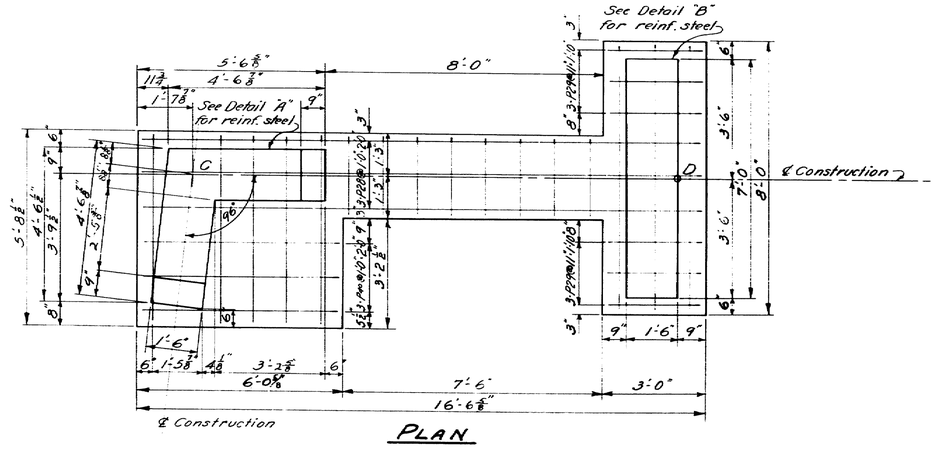


DETAIL C

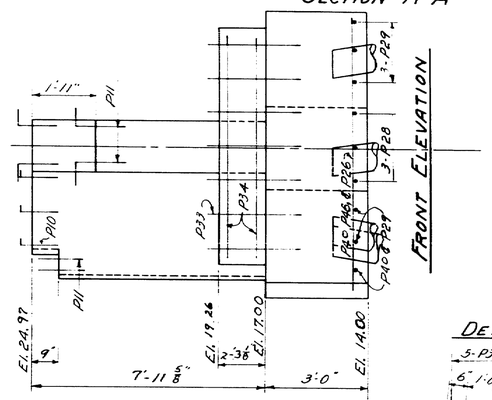
FLOOR SLAB DETAIL



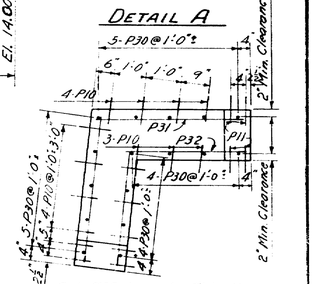
SECTION A-A



PLAN

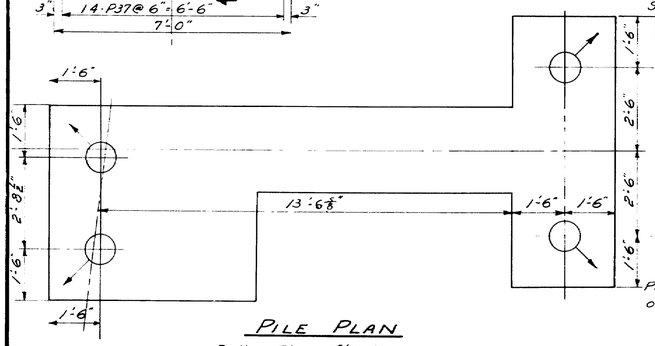


FRONT ELEVATION



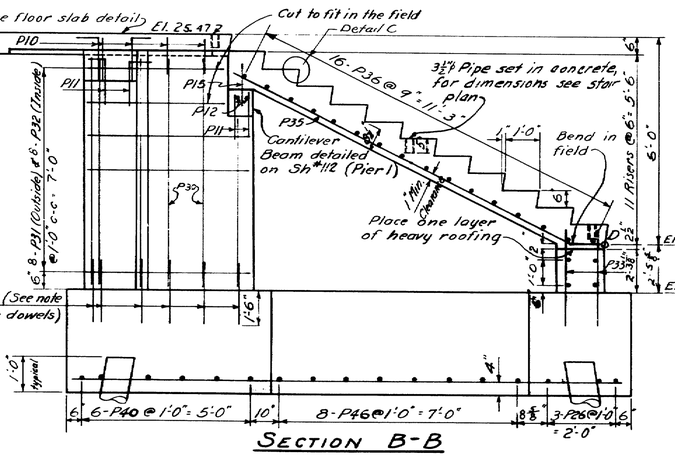
DETAIL A

Cut P30 bars to fit in the field (4 bars)
Splice P10 to P38 & P39
Splice P11 to P12 (Sh. 112 Cant. Beam Details)



PILE PLAN

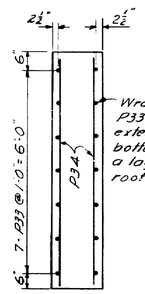
Batter Piles 2"/ft. in the direction shown. Use 4-12" ϕ Cast in Place Conc. Piles. Allowable load 24 tons/pile. See Sh. 114 for details.
Estimated length below cut-off = 65'



SECTION B-B

Coordinates
Point C {N6423.00, E3066.27
Point D {N6424.35, E3052.19

NOTE:
Splice P30 bars to dowels (P3), spacing of dowels will be the same as shown in Detail A for P30 bars.
Chamfer all exposed edges of concrete ¾" unless otherwise specified.
Reinforcing steel in the footing may be moved to clear piles.
Reinforcing steel may be moved to clear pipes for rails.



DETAIL B

DESIGN – LANGFORD	BRIDGE NO.
TRACE – SAVAGE	SURVEY –
CHECK – [illegible]	PLOT –

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

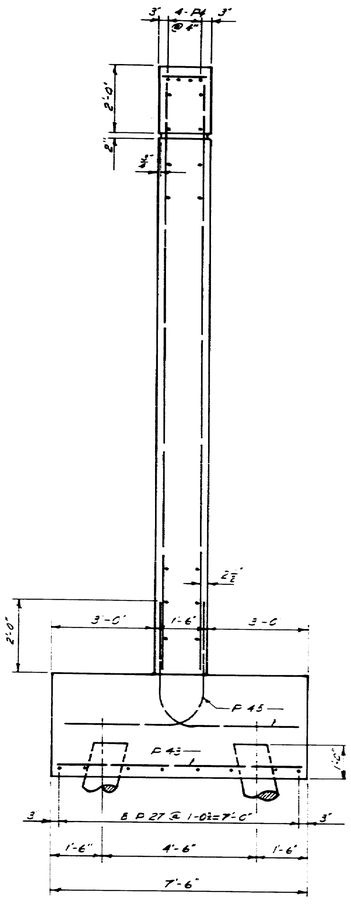
PEDESTRIAN OVERPASS
PIER 1, COLUMNS & STAIRS

SHEET 113 OF 166 AUGUSTA, MAINE OCT. 1957.

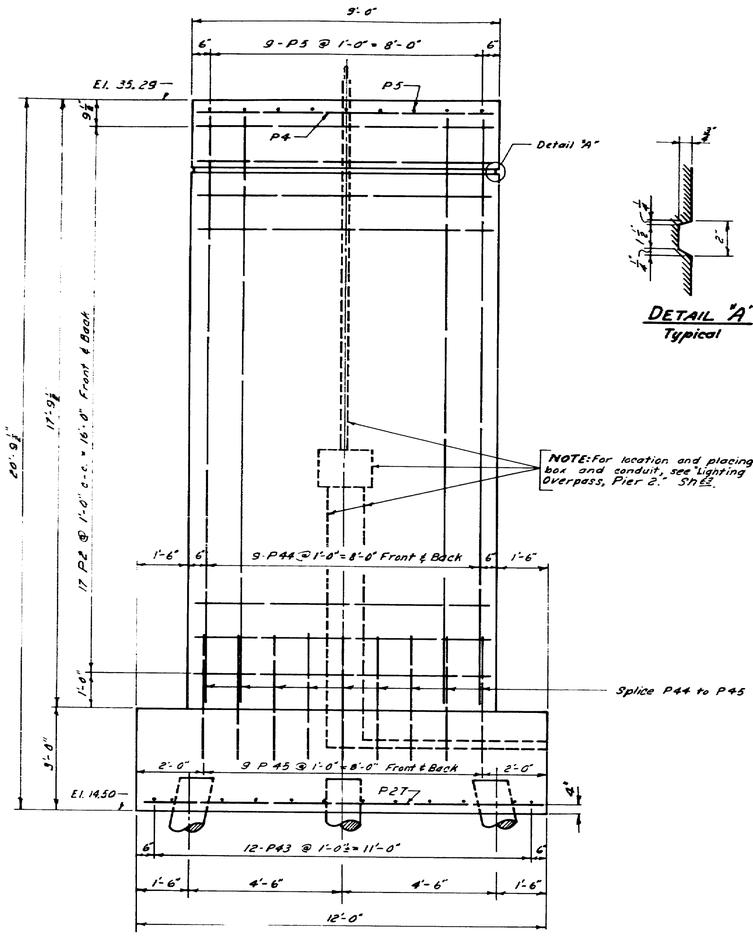
76-113

0 1 2 3 4 5 INCHES

B P R REG. NO	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	MAINE	[illegible]	114	166



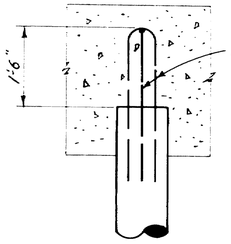
END ELEVATION



SIDE ELEVATION

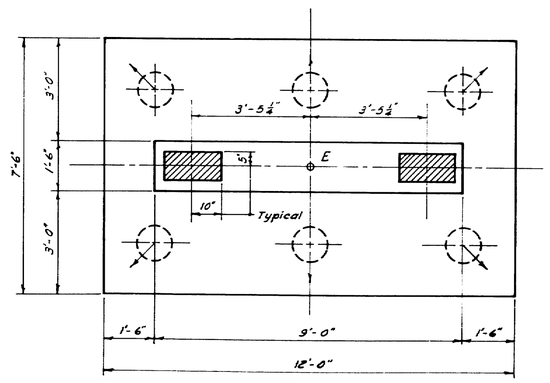
DETAIL "A"
Typical

NOTE: For location and placing of junction box and conduit, see "Lighting Details, Pedestrian Overpass, Pier 2." Sheet



TOP OF PILE DETAIL

Note:—
"Bars P47 are listed in the reinforcing steel schedule and will be paid for as reinforcing steel. If the top of the piles are required to be reinforced in accordance with the specifications, the P47 bars are to be omitted."



PLAN

NOTE: Dress shaded bearing areas to El. 35.29. Place reinforcing steel in bridge seat to clear anchor bolts. Batter piles 2"/ft in direction shown by arrow. Use 6-12" ϕ cast in place concrete piles. Allowable load 24 Tons/pile.

Estimated length below cut-off = 65'.

Coordinates Point E { N 6464.90 / E 2983.69

DESIGN - LANGFORD
TRACE - AULT
CHECK - [illegible]

BRIDGE NO
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

PEDESTRIAN OVERPASS
PIER 2

SHEET 114 OF 166 AUGUSTA, MAINE OCT. 1957

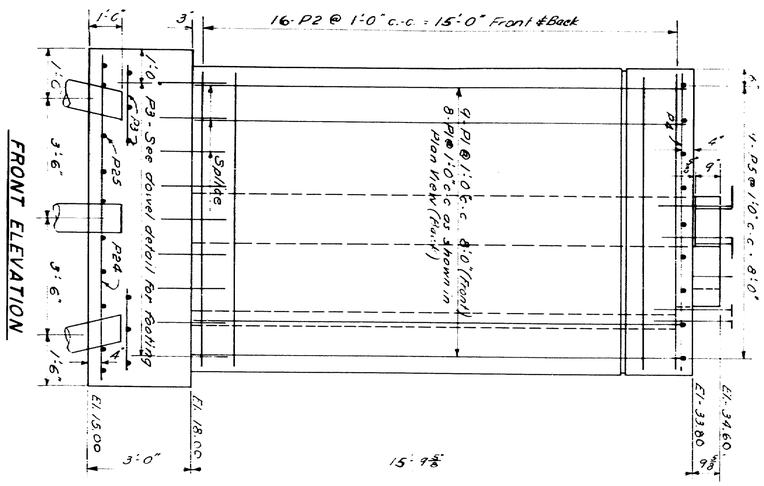
76-114

0 1 2 3 4 5 INCHES

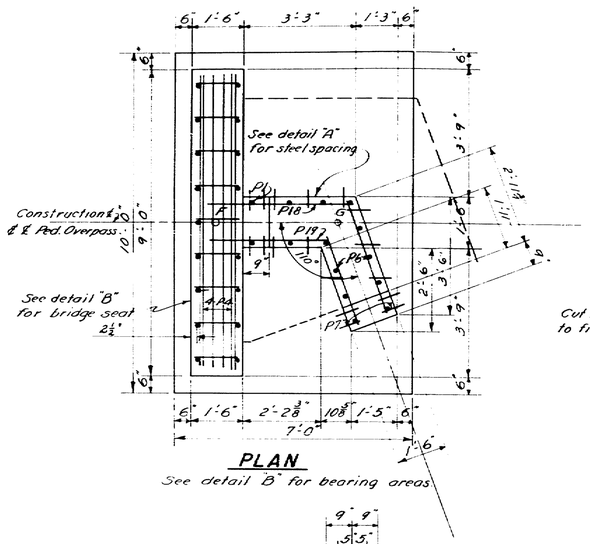
B. P. R. SEC. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~CC-2~~ [illegible]	115	166

1" = 14'-0"

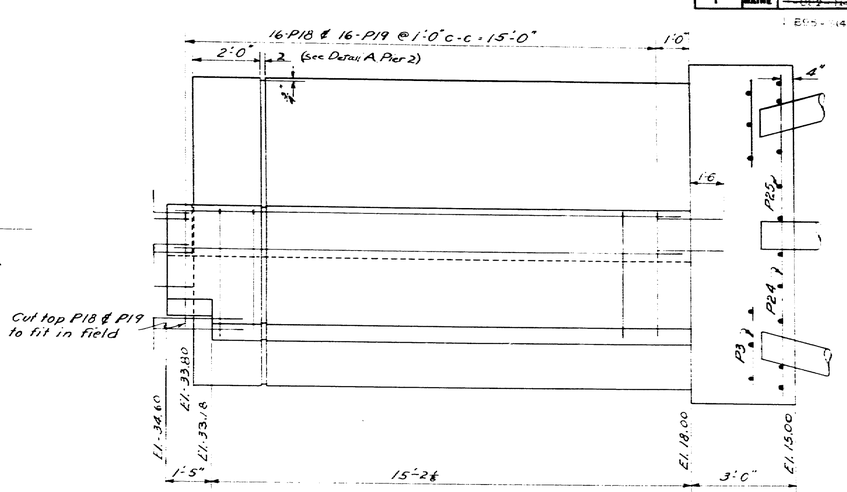
FRONT ELEVATION



PLAN

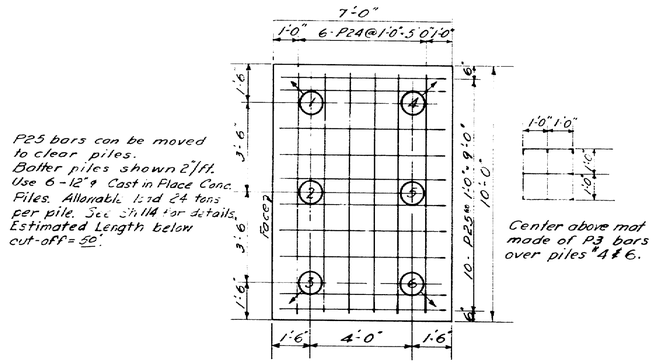


REAR ELEVATION



Cut top P18 & P19 to fit in field

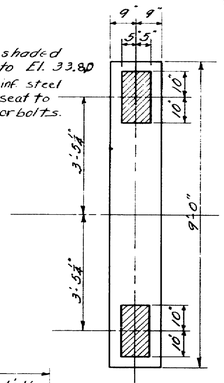
PILE PLAN



P25 bars can be moved to clear piles.
Batter piles shown 2/ft.
Use 6-12"ø Cast in Place Conc. Piles. Allowable load 24 tons per pile. See Sh. 114 for details.
Estimated Length below cut-off = 50'.

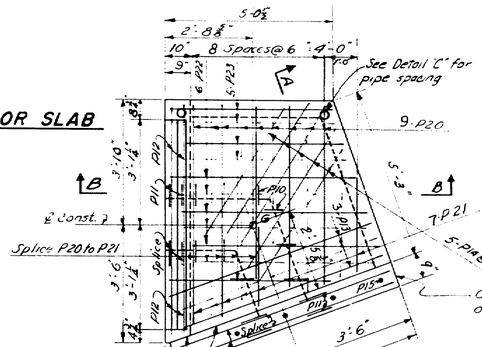
Center above mat made of P3 bars over piles 4 & 6.

DETAIL B



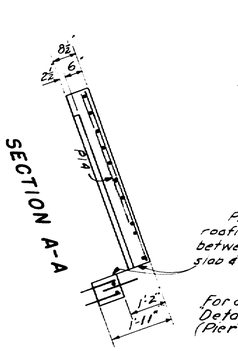
Bush shaded areas to El. 33.80
Place Reinf. steel in bridge seat to clear anchor bolts.

FLOOR SLAB



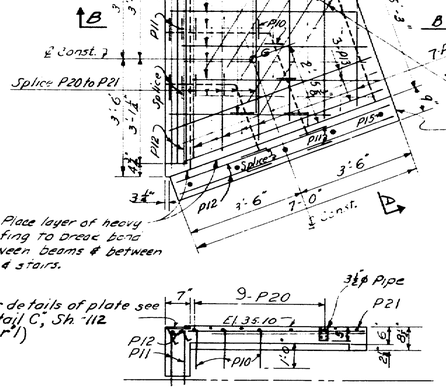
NOTE:
Splice P10 to P20, P22 & P23 where shown.
Slab is not to be cast until Rail Details are approved.

SECTION A-A

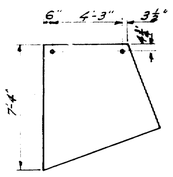


Place layer of heavy roofing to break bond between beams & between slab & stairs.

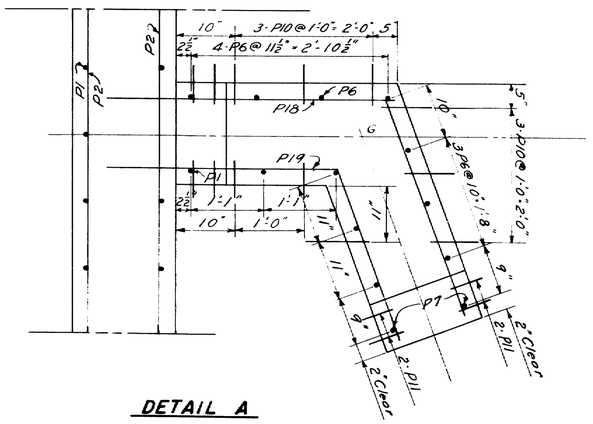
SECTION B-B



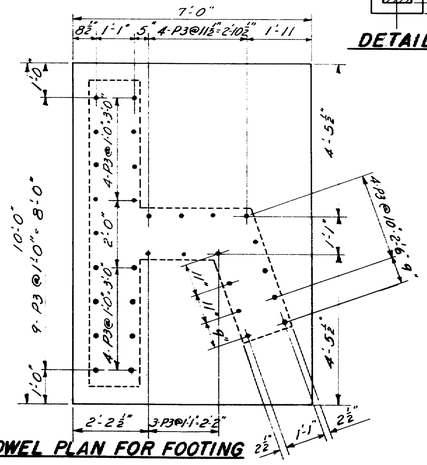
DETAIL C



DETAIL A



DOWEL PLAN FOR FOOTING



Coordinates
Point F { N 6481.80 / E 2900.39
Point G { N 6482.49 / E 2896.99

NOTE:- Chamfer all exposed edges of concrete 3/4" unless otherwise noted.

DESIGN - LANGFORD	BRIDGE NO.
TRACE - SAVAGE	SURVEY -
CHECK - MAC	PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
PEDESTRIAN OVERPASS
PIER 3

SHEET 115 OF 166 AUGUSTA, MAINE OCT. 1957.

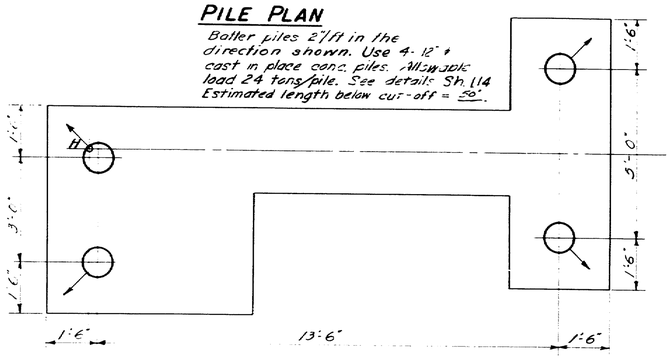
76-115

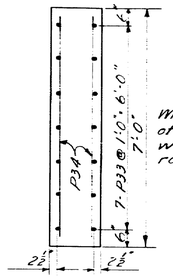
0 1 2 3 4 5 INCHES

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~1-062-1122~~	116	166

PILE PLAN

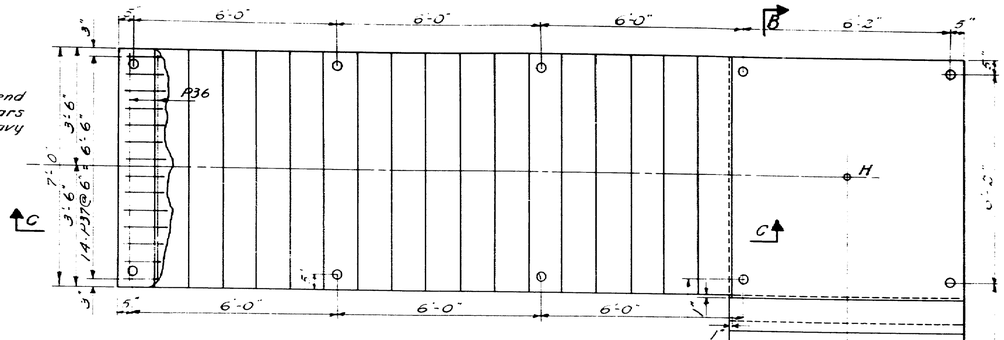
Batter piles 2"/ft in the direction shown. Use 4-12" ϕ cast in place conc. piles. Allowable load 24 tons/pile. See detail Sh. 114 Estimated length below cut-off = 50'.

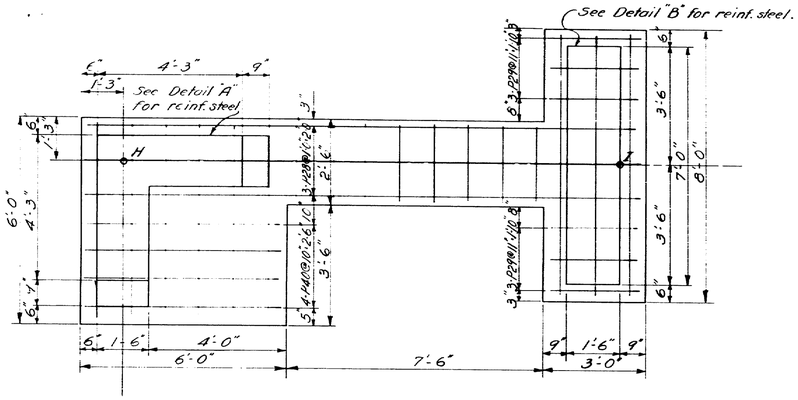




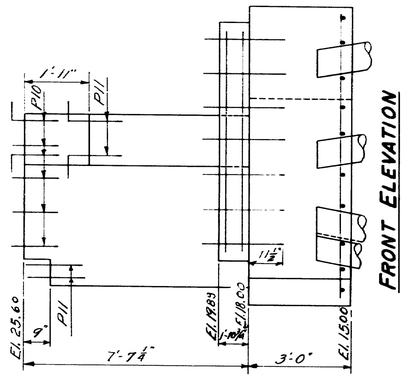
Wrap the end of P33 bars with heavy roofing.

DETAIL B





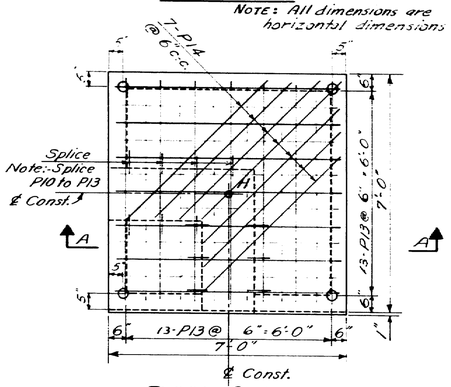
PLAN



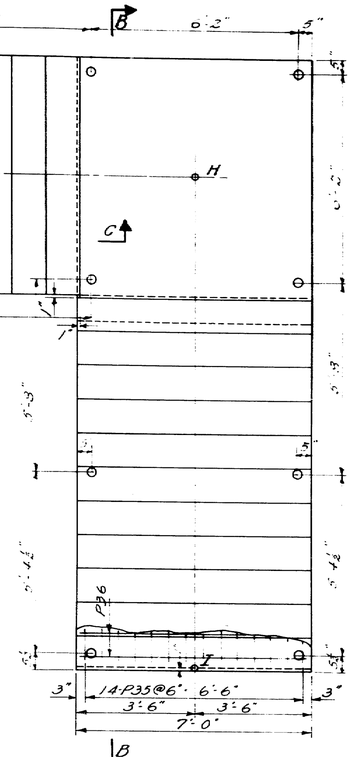
FRONT ELEVATION

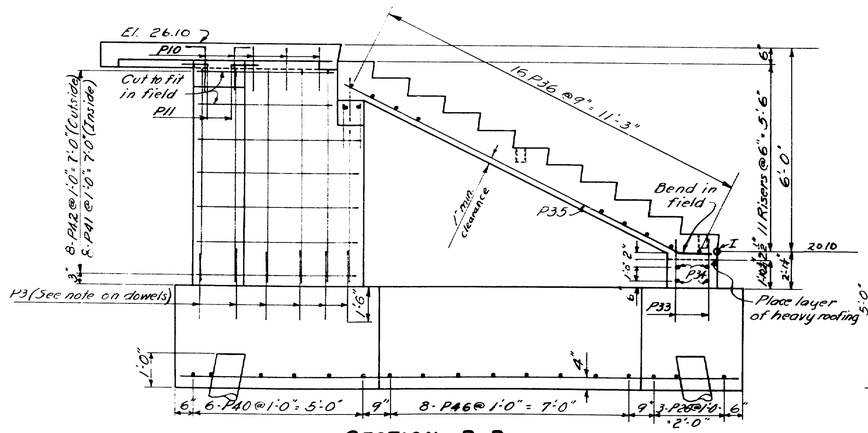
STAIR PLAN

Note: All dimensions are horizontal dimensions

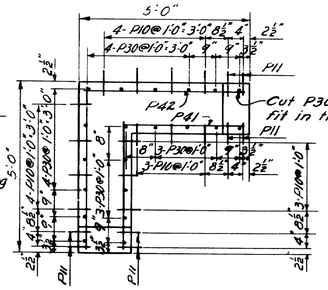


FLOOR SLAB

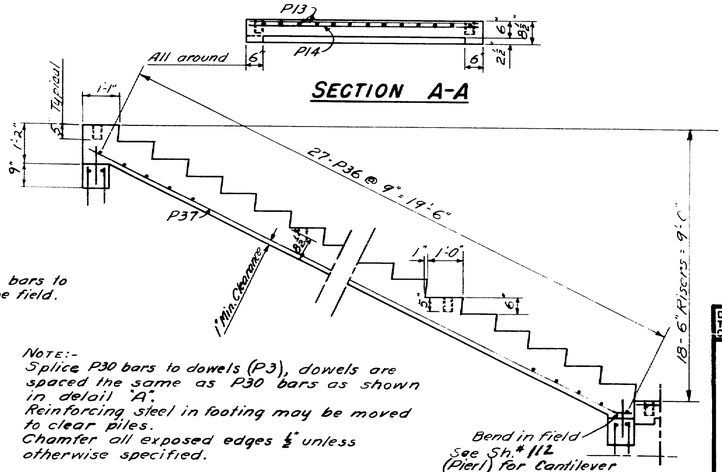




SECTION B-B



DETAIL A



SECTION A-A

SECTION C-C

NOTE:-
Splice P30 bars to dowels (P3), dowels are spaced the same as P30 bars as shown in detail "A". Reinforcing steel in footing may be moved to clear piles. Chamfer all exposed edges ¾" unless otherwise specified.

Coordinates
Point H {N6506.17 E2893.44
Point I {N6508.32 E2907.78

NOTE: Stairs & Floor Slabs should not be cast until the rail detail has been approved.

DESIGN - LANGFORD
TRACE - SAVAGE
CHECK - ~~LLC~~
BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
PEDESTRIAN OVERPASS
PIER 3, COLUMNS & STAIRS

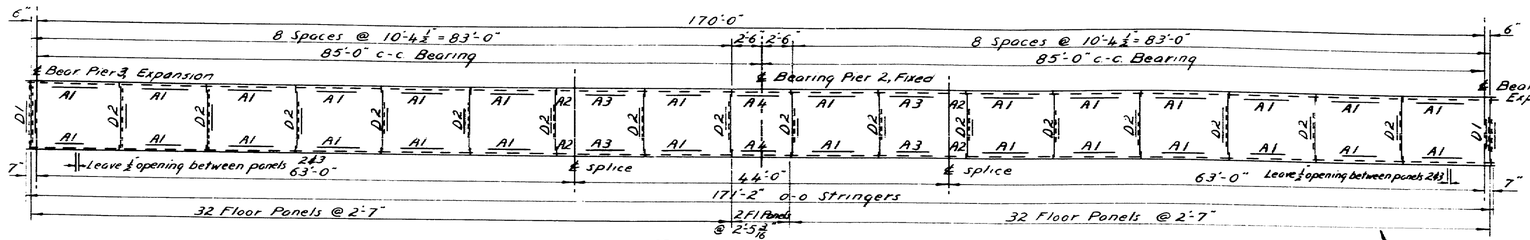
SHEET 116 OF 166 AUGUSTA, MAINE OCT. 1957.

76-116

0 1 2 3 4 5 INCHES

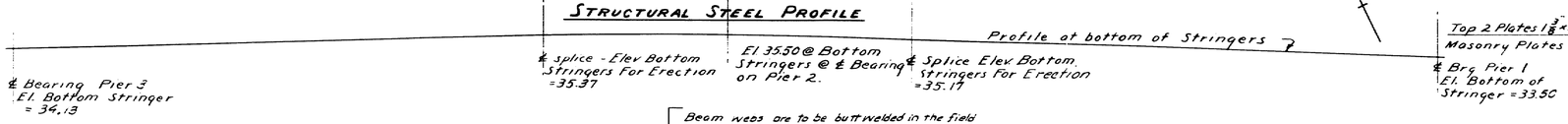
B.P.R. SEC. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	[illegible]	117	166

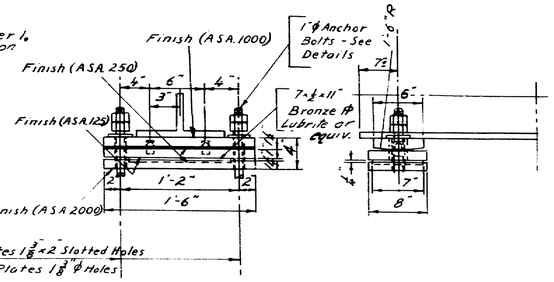
F-D-5-3141 50



FRAMING PLAN

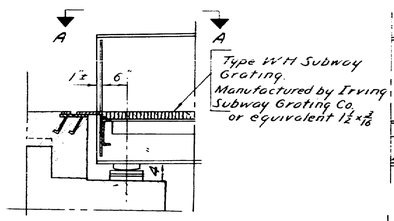
STRUCTURAL STEEL PROFILE



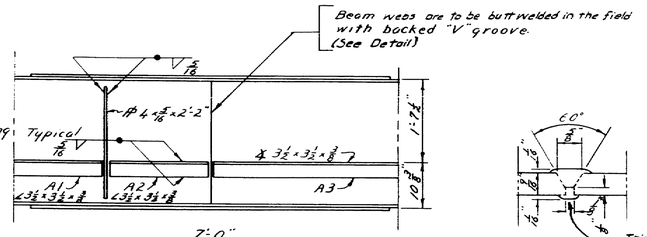


EXPANSION BEARINGS

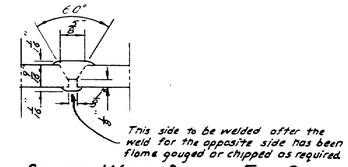
4 Required
See Details For Pintle Pin



TYPICAL SECTION - PIERS 1 & 3



SPLICE DETAILS

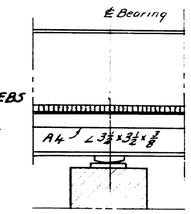


SPLICE WELD DETAIL FOR STRINGER WEBS

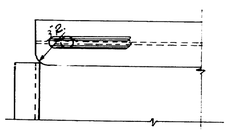
NOTE: In order to insure that the correct distance (℄) between beams is maintained for field welding the beams are to be laid out, fitted and match marked in the shop.

STRINGERS REQUIRED

4-30 WF 108 x 63'-7½" - No Camber
2-30 WF 108 x 44'-0" - Camber 2½"



TYPICAL SECTION - PIER 2



VIEW A-A

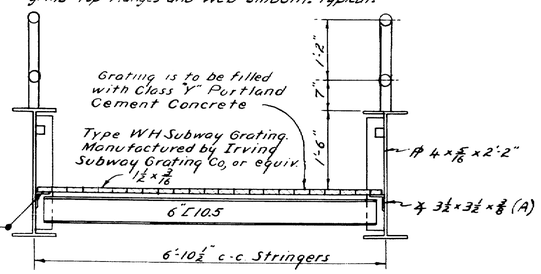
Cut 3" radius inside top flanges, and grind top flanges and web smooth. Typical.

D1

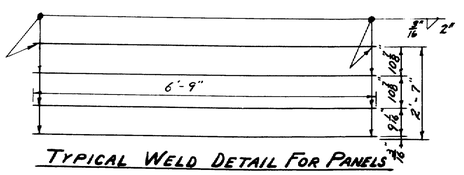
2 Required

SECTION A-A

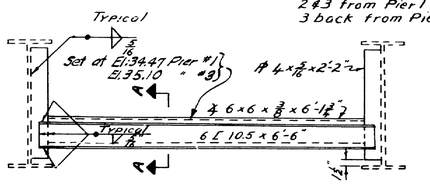
For additional expansion dam details see sh. 112, Pier 1.



TRANSVERSE SECTION

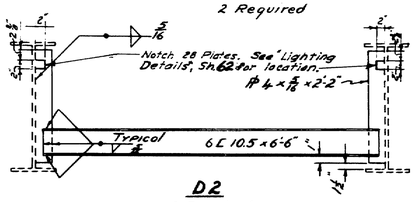


TYPICAL WELD DETAIL FOR PANELS



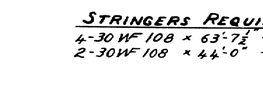
D1

2 Required



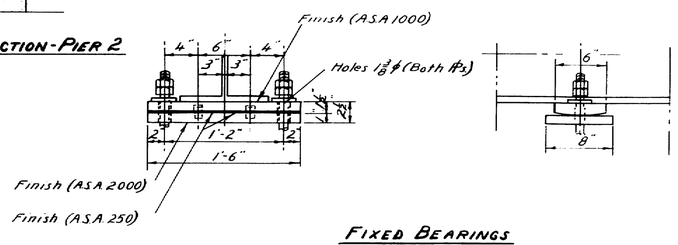
D2

16 Required



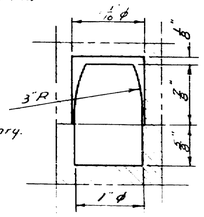
TYPICAL GRATING DETAIL

64 Panels 2'-7" x 1½" x 6'-9"
2 Panels 2'-5 3/16" x 1½" x 6'-9"
Main bars are 1⅜ x ⅜"
Leave ½" opening between panels
2 ℄ 3 from Pier 1 ℄ panels 2 ℄ 3 back from Pier 3



FIXED BEARINGS

2 Required
See Details For Pintle Pins



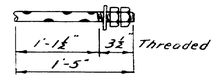
PINTLE PIN

NOTE:
Bearing devices are to be welded to the bottom of the stringers in the field with a ⅜" fillet weld.

1" ℄ Swedge anchor bolts are to be used with 2 Hex Nuts ℄ 1-3" ℄ x ⅜" washer.

Anchor bolts are to be set at least 10" into the masonry.

The two nuts on the fixed end expansion bearings are to be locked together, but not tightened down on the bearing plates.



SWEDGE ANCHOR BOLT

12 Required

SPECIFICATIONS: Materials, fabrication and erection shall conform to the "State of Maine, State Highway Commission, Standard Specifications, Highway and Bridges, Revision of January 1956." Design shall conform to the A.A.S.H.O. Standard Specifications for Highway Bridges 1953.

NOTES: The 2½" camber in the 44'-0" beams and any natural camber in the 63'-7½" beams shall be placed with the convex flange up.

The beams and the flange splice plates shall conform to the latest revised specifications for Structural Weldable Steel of the A.S.T.M Designation A-373.

LIVE LOADING: 85 lbs/sq. ft.

Note - Payment for concrete filling for grid floor shall be included under Item 706-15 "Steel Grid Flooring, Concrete Filled Type". Cement shall be paid for under Item 701-47.

DESIGN - LANGFORD	BRIDGE NO.
TRACE - V. SMITH	SURVEY -
CHECK - [illegible]	PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

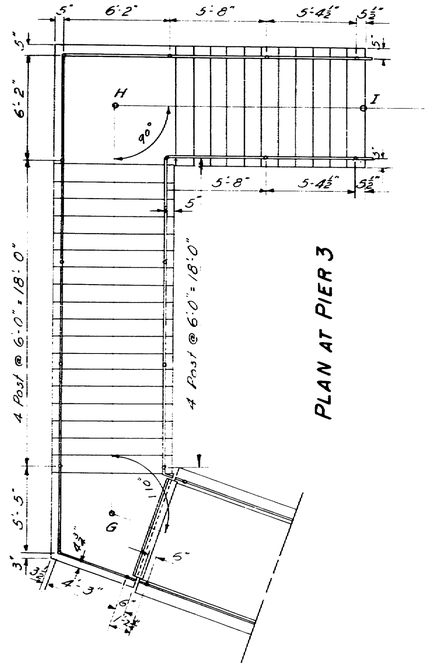
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
PEDESTRIAN OVERPASS
SUPERSTRUCTURE

SHEET 117 OF 166 AUGUSTA, MAINE OCT. 1957

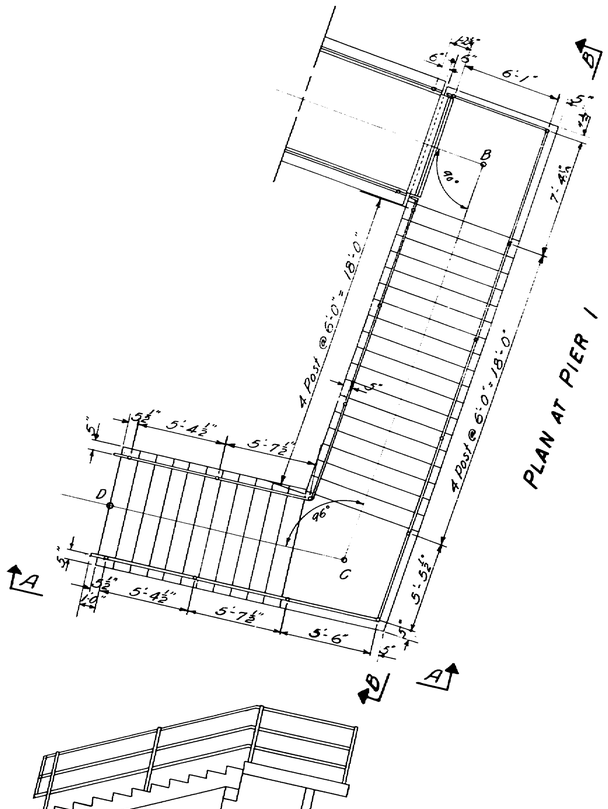
76-117

0 1 2 3 4 5 INCHES

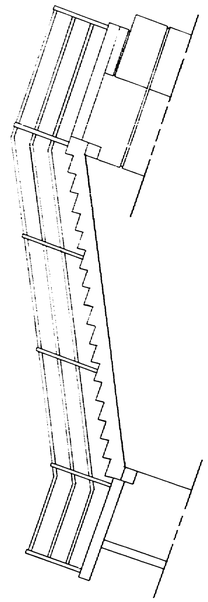
B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~F-005-1(12)~~	118	166



PLAN AT PIER 3

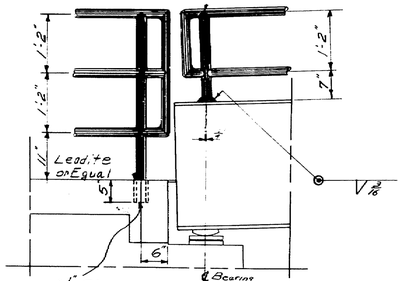


PLAN AT PIER 1

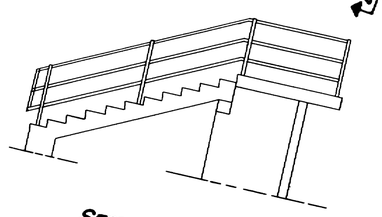


SECTION B-B
PIER 3 SIMILAR

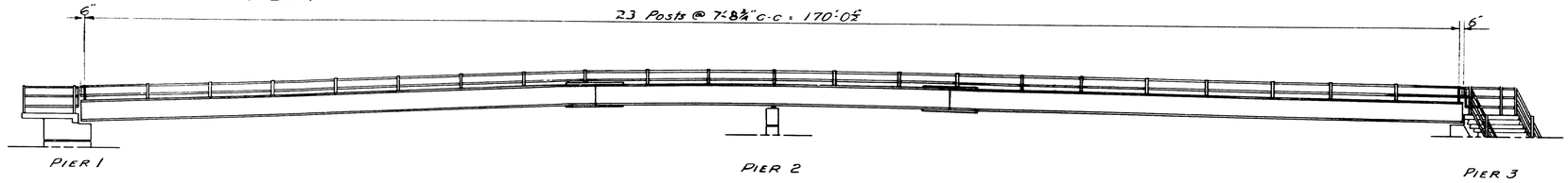
Coordinates
Point B { N 6447.15
E 3071.17
Point C { N 6423.00
E 3066.27
Point D { N 6424.35
E 3052.19
Point G { N 6482.49
E 2896.99
Point H { N 6506.11
E 2893.44
Point I { N 6508.32
E 2907.78



SECTION AT PIER 1



SECTION A-A
PIER 3 SIMILAR



RAIL ON SUPERSTRUCTURE LOOKING SOUTH

NOTE:- Details of rails must be submitted to the Engineer for approval before erection.

Posts and rail pipe are to be 2" ϕ extra strong wrought iron or alloy steel. The rail posts on the stairs are to be set with Leadite or equal into a 3½" Sleeve, see details of sleeve. Rail Posts on the Superstructure are to be erected normal to the tops of the stringers and welded to them.
Stairs are not to be built until the Rail Details have been approved.
Payment for furnishing and setting 3½" ϕ sleeve to be included under Item 805-11 "Pipe Rail"

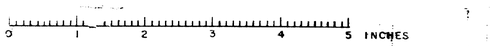
DESIGN – LANGFORD TRACE – SAVAGE CHECK – MCB	BRIDGE NO. SURVEY – PLOT –

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

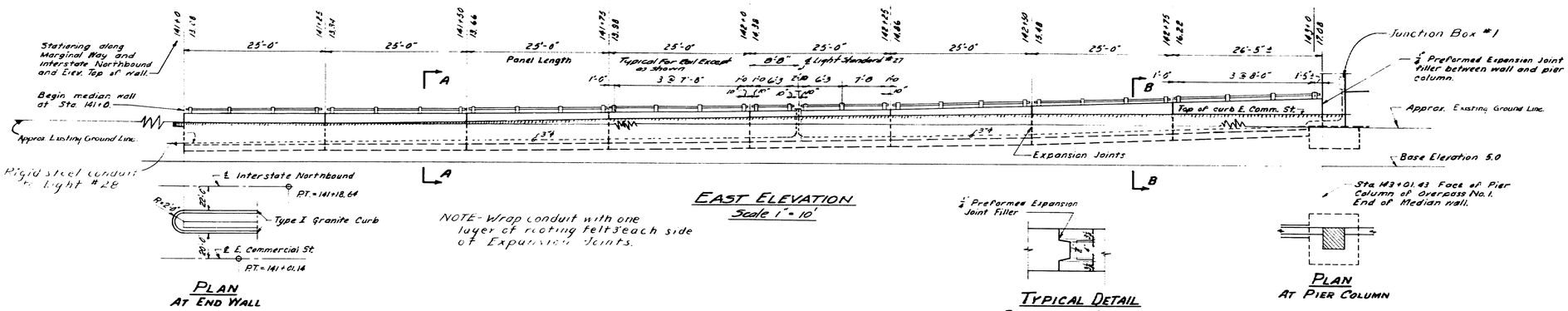
PEDESTRIAN OVERPASS
RAIL DETAILS
SHEET 118 OF 166 AUGUSTA, MAINE OCT. 1957

76-118



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~1-066-141~~	119	166

E95-[illegible]



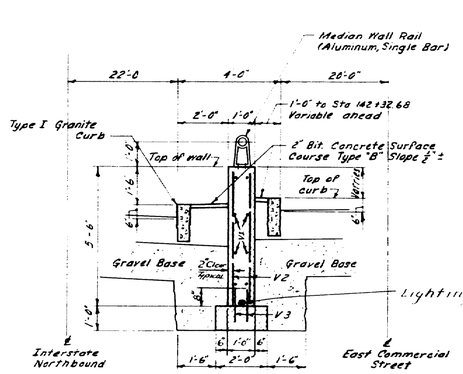
PLAN AT END WALL

EAST ELEVATION
Scale 1" = 10'

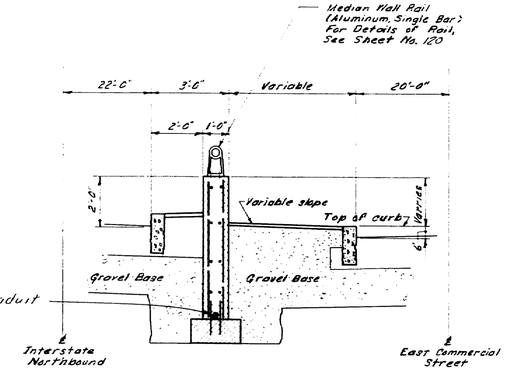
NOTE - Wrap conduit with one layer of roofing felt 3' each side of Expansion Joints.

TYPICAL DETAIL EXPANSION JOINT

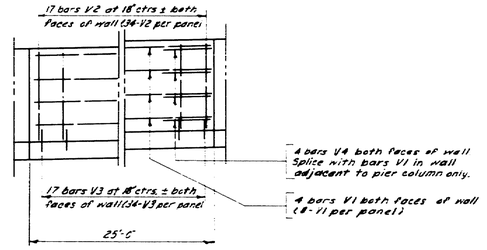
PLAN AT PIER COLUMN



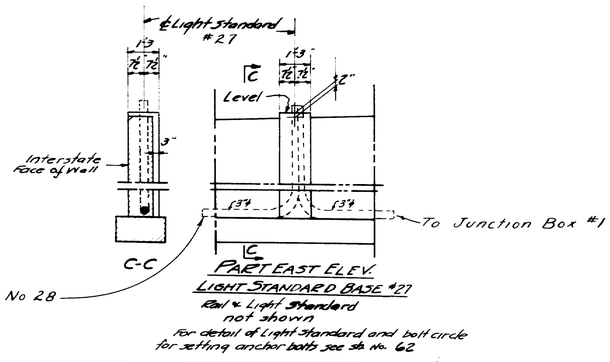
SECT. A-A
Typical



SECT. B-B



WALL ELEVATION
25 foot Panel Length - Typical except as noted



PART EAST ELEV. LIGHT STANDARD BASE #27
Rail & Light Standard not shown
For detail of Light Standard and bolt circle for setting anchor bolts see Sh. No. 62

DESIGN - EVERETT	BRIDGE NO.
TRACE - AULT	SURVEY -
CHECK - [illegible]	PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

CONCRETE MEDIAN WALL
MEDIAN WALL RAIL

SHEET 119 OF 166 AUGUSTA, MAINE OCT. 1957

76-119

0 1 2 3 4 5 INCHES

D P R REG. NO	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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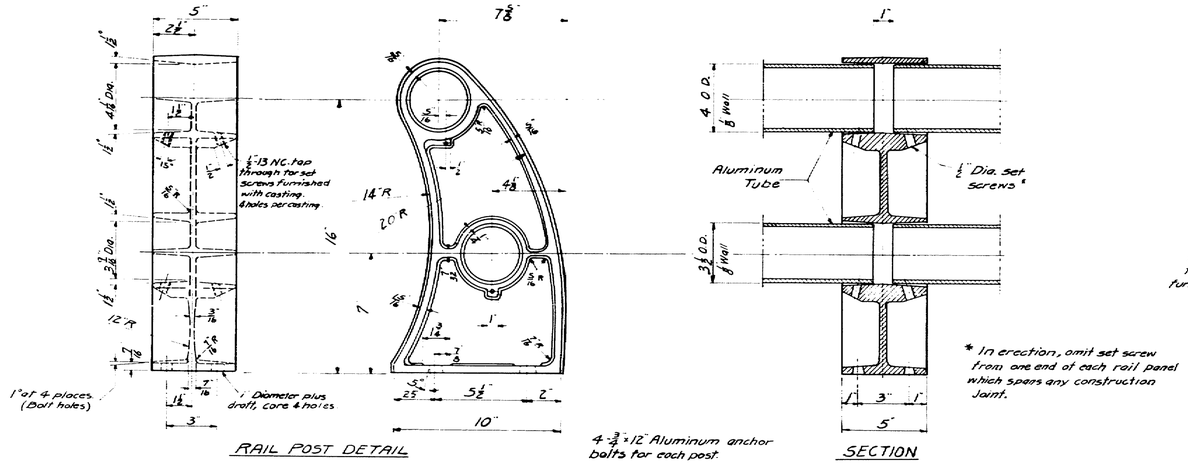
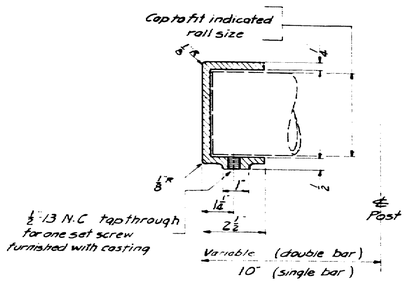


RAIL POST DETAIL

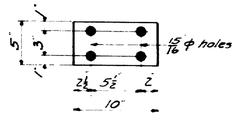
SECTION

4-⅞" x 12" Aluminum anchor bolts for each post.

* In erection, omit set screw from one end of each rail panel which spans any construction joint.



RAIL CAP DETAIL
(Typical)

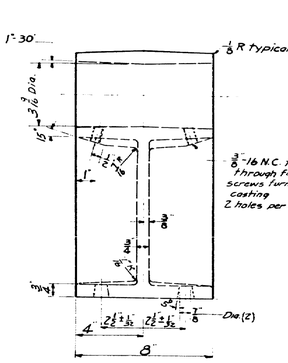


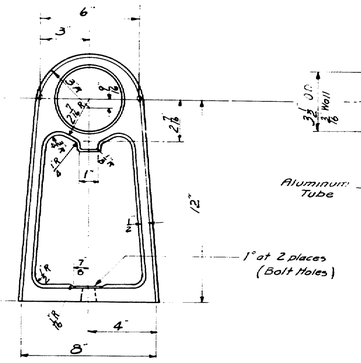
SHIM

Aluminum Alloy 5"-¼" x 0'-10" To be used and/or cut as necessary. Furnish in the amount of 50 percent of posts required.

ALUMINUM RAIL - DOUBLE BAR

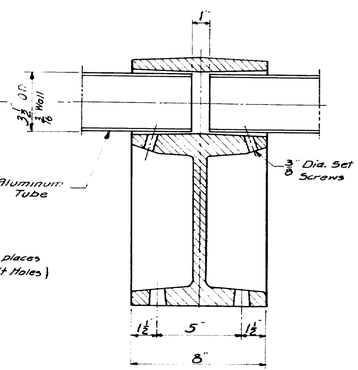
For Overpasses 1 and 2



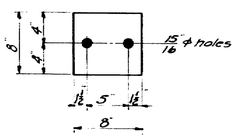


RAIL POST DETAIL

2-¾" x 12" Aluminum anchor bolts for each post.



SECTION



SHIM

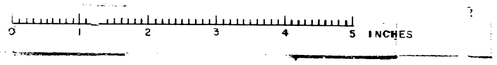
Aluminum alloy 8"x1/8"x0'-8" To be used and/or cut as necessary. Furnish in the amount of 50 percent of posts required.

ALUMINUM RAIL - SINGLE BAR

(For Median Wall)

NOTE

All Rail dimensions shown on these plans are horizontal.
Rails to be parallel to grade.
Substitutions may be made provided they are approved by the Engineer.
All material in rails to be aluminum alloy. Complete rail Details shall be furnished by the Contractor before fabrication is started.



DESIGN - DET. MOLLICONE	BRIDGE NO.	
TRACE - JONES	SURVEY -	
CHECK -	PLOT -	

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

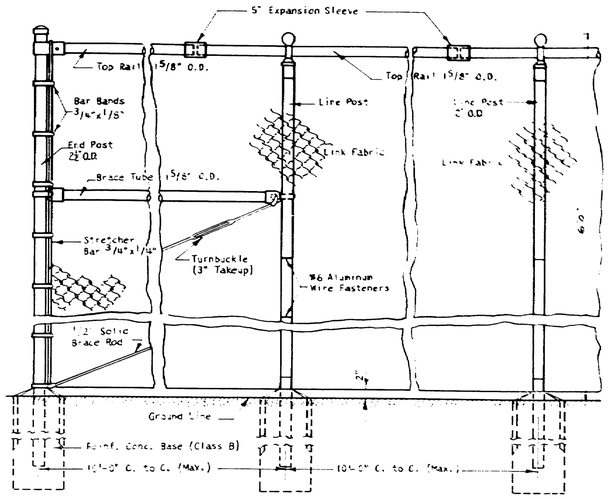
RAIL DETAILS, OVERPASSES AND MEDIAN WALL

SHEET 120 OF 166 AUGUSTA, MAINE OCT. 1957

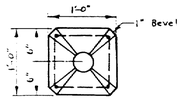
76-120

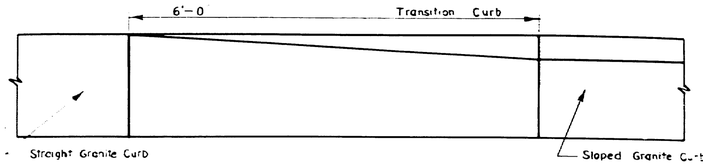
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~I-CBC (14)~~	121	166

1955-241: 50



CHAIN LINK FENCE

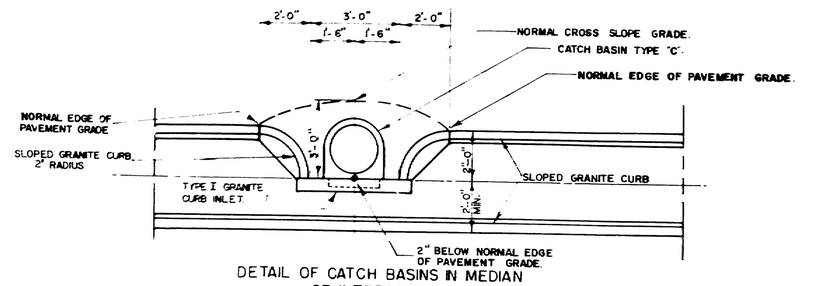




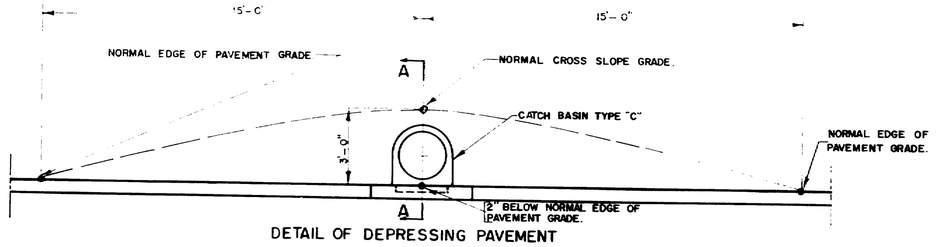
FACE VIEW

GRANITE TRANSITION CURB

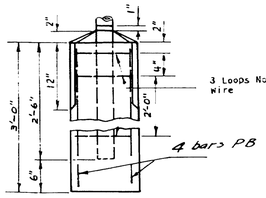
Payment for Granite Transition Curb to be made under Item 901-12 "Sloped Granite Curb."



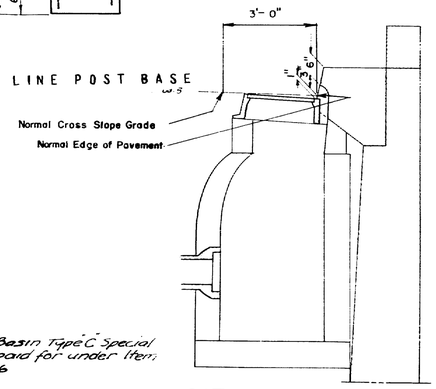
DETAIL OF CATCH BASINS IN MEDIAN OF INTERSTATE



DETAIL OF DEPRESSING PAVEMENT
TYPE "C" CATCH BASINS
VERTICAL CURB AREA

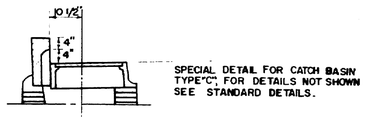


LINE POST BASE



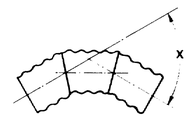
Catch Basin Type "C" Special to be paid for under Item 605-16

CATCH BASIN
TYPE "C" SPECIAL



SPECIAL DETAIL FOR CATCH BASIN TYPE "C", FOR DETAILS NOT SHOWN SEE STANDARD DETAILS.

CATCH BASIN
TYPE-C
A-A



3-PIECE ELBOW
FOR DRAINAGE PIPE

NOTE: ALL FITTINGS ARE TO BE FURNISHED IN AS SHORT LENGTHS AS POSSIBLE BUT WITH SUFFICIENT LENGTH FOR ATTACHING STANDARD CONNECTING BANDS.

PIPE SLOPE	ANGLE X
.000 TO .131	0°
.132 TO .221	10°
.222 TO .315	15°
.316 TO .414	20°
.415 TO .520	25°
.521 TO .637	30°

FOR PIPE SLOPES SEE "DRAINAGE PROFILES"

DESIGN-DET. GARDNER.
TRACE-GARDNER.
CHECK-AS WITNESSED
BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
SPECIAL DETAILS

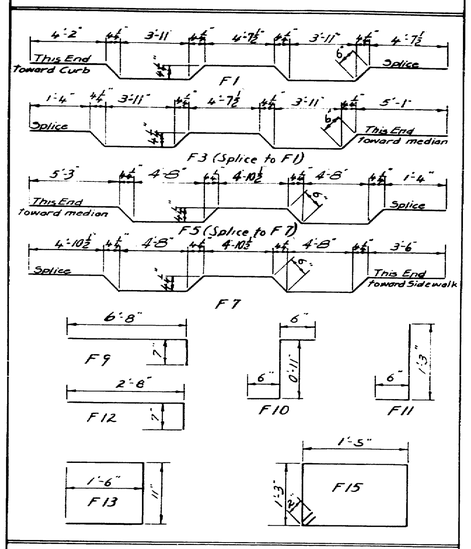
SHEET 121 OF 166 AUGUSTA, MAINE OCT. 1957

76-121

0 1 2 3 4 5 INCHES

B.P.R. SEQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	[illegible]	122	166

TUKEY'S BRIDGE SUPERSTRUCTURE



BENT BARS

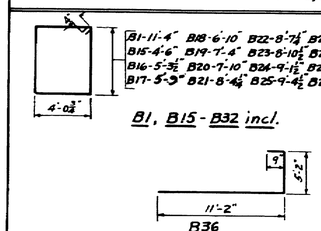
MARK	SIZE	NO.	LENGTH	LOCATION
F1	#6	500	23'-3	SLAB PANELS A1, A, B1, B, C & C1
F3	#6	500	20'-10½"	" " A1, A, B1, B, C & C1
F5	#6	500	22'-0⅝"	" " D, E, F, D1 & F1
F7	#6	500	24'-7"	" " D, E, F, D1 & F1
F9	#5	502	7'-3"	SIDEWALK
F10	#5	1000	1'-11"	SIDEWALK & CURB
F11	#5	996	1'-9"	" "
F12	#5	502	3'-3"	CURB
F13	#4	18	3'-11"	LIGHT POST BASES
F15	#4	1004	5'-8"	MEDIAN CURBS

STRAIGHT BARS.

F2	#6	996	23'-0"	SLAB PANELS A1, A, B1, B, C1 & C (Median Side)
F4	#6	996	20'-0"	" " A1, A, B1, B, C1 & C (Curb Side)
F6	#6	996	23'-3"	" " D, E, F, D1 & F1 (Sidewalk Side)
F8	#6	996	23'-0"	" " D, E, F, D1 & F1 (Median Side)
F14	#5	15	3'-0"	LIGHT POST BASES
F16	#4	210	24'-8"	SIDEWALK, CURB & MEDIAN, PANELS B1, B & E
F17	#4	30	18'-8"	" " " A1 & D1 ABUT. 1 & 2
F18	#4	60	19'-2"	" " C, F, C1 & F1
F19	#5	1862	24'-8"	SLAB PANELS B1, B & E.
F20	#5	266	18'-3"	" " A1 & D1 ABUT. 1 & 2
F21	#5	532	19'-2"	" " C, F, C1, F1
F22	#4	30	17'-8"	SIDEWALK, CURB & MEDIAN PANELS A & D, PIER 1 & 3
F23	#5	266	17'-8"	SLAB PANELS A & D @ PIERS 1 & 3.

✓A.B.P.

TUKEYS BRIDGE - PIERS 1, 2, & 3



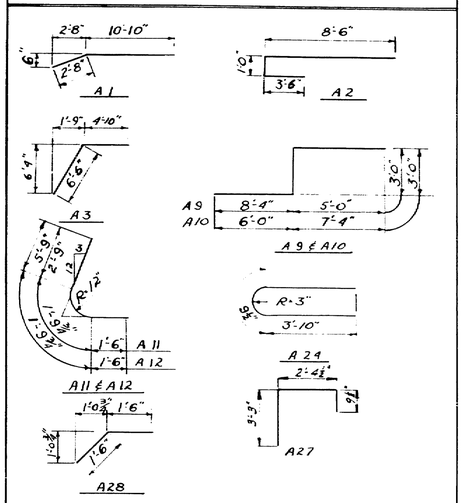
BENT BARS

MARK	SIZE	NUMBER PIER 1	PIER 2	PIER 3	TOTAL	LENGTH	LOCATION
B1	#6	34	54	54	162	31'-6"	Cap
B15		4	4	4	12	17'-10"	
B16		4	4	4	12	19'-5"	
B17		4	4	4	12	20'-4"	
B18		4	4	4	12	22'-6"	
B19		4	4	4	12	23'-6"	
B20		4	4	4	12	24'-5"	
B21	#6	4	4	4	12	25'-6"	
B22		4	4	4	12	26'-0"	
B23		4	4	4	12	26'-7"	
B24		4	4	4	12	27'-1"	
B25		4	4	4	12	27'-7"	
B26		4	4	4	12	28'-1"	
B27		4	4	4	12	28'-7"	
B28		4	4	4	12	29'-1"	
B29		4	4	4	12	29'-7"	
B30		4	4	4	12	30'-2"	
B31		4	4	4	12	30'-8"	
B32		4	4	4	12	31'-2"	
B36	#5	88	80	56	224	17'-1"	Column
B11A	#6	4	4	4	12	21'-4"	Cap

STRAIGHT BARS

B2	#5	20	20	20	60	40'-0"	Cap
B3	#5	16	16	16	48	25'-9"	
B4	#11	34	34	34	102	14'-0"	
B5	#11	34	34	34	102	25'-6"	
B6	#11	34	34	34	102	31'-6"	
B7	#6	8	8	8	24	31'-3"	Bend in Field
B8	#10	9	9	9	27	37'-0"	
B9	#5	4	4	4	12	22'-7"	
B10	#5	4	4	4	12	20'-0"	
B11	#5	4	4	4	12	17'-4"	
B12	#5	4	4	4	12	14'-8"	
B13	#5	4	4	4	12	12'-0"	
B14	#5	4	4	4	12	9'-5"	
B33	#9	64	64	64	192	6'-0"	Footing
B34	#6	24	24	24	72	18'-0"	Footing
B35	#6	36	36	36	108	12'-0"	Footing
B37	#9	64	64	64	192	20'-0	Column
B38	#9	24			24	17'-0"	
B39	#9		24		24	15'-0"	
B40	#9			24	24	6'-0"	
B41	#9	40			40	22'-0"	
B42	#9		40		40	19'-6"	
B43	#9			40	40	10'-6"	

TUKEYS BRIDGE — ABUTMENTS



BENT BARS

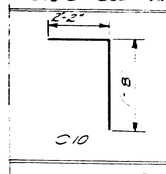
Mark	Size	No.	Length	Location
A1	#5	120	13'-6"	Abutment No. 1 & 2
A2	#6	120	13'-0"	do
A3	#5	120	11'-4"	do
A9	#6	56	16'-4"	Bottom Wing footings Abut. No. 1 & 2
A10	#6	36	16'-4"	Top " " " " 1 & 2
A11	#6	52	6'-0⅜"	Wing Footings Abut. No. 1 & 2
A12	#6	16	9'-0⅜"	do
A24	#6	29	8'-5⅝"	Rail Wall Wings Abut. No. 1 & 2
A27	#6	24	6'-5"	Curb section, So. Bound Lane Wings, Abut #1 & 2
A28	#8	84	3'-0"	Dowels approach slabs to Abut. No. 1 & 2

STRAIGHT BARS

Mark	Size	No.	Length	Location
A 4	#5	120	2'-6"	Abutment No. 1 & 2
A 5	#6	120	6'-9"	do
A 6	#6	120	20'-0"	do
A 7	#6	60	27'-9"	do
A 8	#6	60	23'-9"	do
A13	#8	112	8'-9"	Top & Bottom Wing Footings Abut No. 1 & 2
A14	#5	16	8'-1"	Wing walls Abut. No. 1 & 2
A15	#6	28	8'-2"	do
A16	#6	80	7'-0"	do
A17	#5	60	5'-0"	do
A18	#5	8	6'-1"	do
A19	#5	8	5'-2"	do
A20	#5	16	5'-6"	do
A21	#5	16	13'-0"	do
A22	#5	8	15'-0"	do
A23	#5	40	18'-0"	do
A25	#3	24	7'-6"	Rail wall Wings Abut. No. 1 & 2
A26	#4	8	18'-0"	Curb section, So. Bound Lane Wings, Abut #1 & 2
A29	#5	24	2'-0"	do

✓ E.B.M.

TUKEYS BRIDGE ~ APPROACH SLABS & SIDEWALKS AT ABUTS.



Bent Bars

Mark	Size	No.	Length	Location
C10	#4	40	3'-10"	Approach Slabs (Stirrup)

Straight Bars

C1	#7	6.6	14'-6"	Approach Slabs
C2	#7	40	21'-3"	" "
C3	#4	40	2'-3"	Approach Slabs (dowels)
C4	#5	20	5'-0"	Approach Slabs
C5	#5	90	20'-3"	" " (Spiced)
C6	#5	80	21'-9"	" " "
C7	#4	16	19'-3"	Sidewalks
C8	#4	10	19'-3"	Approach Slab
C9	#4	118	3'-6"	Sidewalk

✓ A.B.P.

DESIGN –	BRIDGE NO.
TRACE –	SURVEY –
CHECK – As installed	PLOT –

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

TUKEYS BRIDGE
REINFORCING STEEL

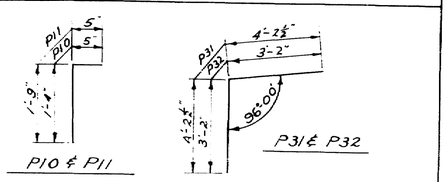
SHEET 122 OF 166 AUGUSTA, MAINE OCT. 1957

76-122

0 1 2 3 4 5 INCHES

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-CCC 1-1(47)	123	166

PEDESTRIAN OVERPASS



BENT BARS

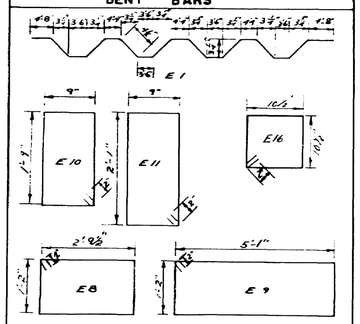
MARK	SIZE	NO	LENGTH	REMARKS
P8	5	17	9'-7"	Pier 1
P9	5	17	7'-7"	" 1
P10	6	49	1'-9"	Piers & Pier Cols 1 & 3
P11	6	32	2'-2"	" " " " " "
P18	5	16	7'-3"	Pier 3
P19	5	16	6'-1"	" 3
P31	5	8	8'-5"	Col Pier 1
P32	5	8	6'-4"	" " 1
P41	5	8	7'-2	" " 3
P42	5	8	9'-2	" " 3
P45	9	18	7'-1"	Pier 2
P47	6	52	6'-4"	Tops of Piles

STRAIGHT BARS

P1	6	38	15'-7"	Piers 1 & 3
P2	5	98	8'-8"	" 1, 2 & 3
P3	6	120	3'-0"	" 1 & 3 & Cols. Piers 1 & 3
P4	4	12	8'-8"	Piers 1, 2 & 3
P5	4	27	1'-2"	" "
P6	6	24	16'-4"	" 1 & 3
P7	6	4	14'-11"	" "
P12	8	16	6'-8"	Cantilever Beam, Piers & Cols. Pier 1 & 3
P13	3	43	6'-8"	Floor slab Piers 1 & 3 Col. Pier 3
P14	4	26	5'-0"	" " " Piers & Cols. Pier 1 & 3
P15	6	30	1'-3"	Cantilever Beam " " " " "
P16	6	10	6'-3"	Footing Pier 1
P17	3	12	7'-0"	Floor Slab Pier 1
P20	3	9	5'-3"	" " " 3
P21	3	7	2'-10"	" " " 3
P22	3	6	5'-5"	" " " 3
P23	3	5	4'-8"	" " " 3
P24	6	12	9'-6"	Footings Pier 1 & 3
P25	6	10	6'-6'	" " 3
P26	6	6	7'-6"	" Cols. Pier 1 & 3
P27	6	8	11'-6"	Footing Pier #2
P28	6	6	16'-0"	Footings Pier Cols. Pier 1 & 3
P29	6	12	2'-6"	" " " 1 & 3
P30	6	36	7'-3"	Cols Pier 1 & 3
P33	6	28	3'-4"	" " "
P34	5	8	6'-6"	" " "
P35	6	28	11'-10"	Stairs Col Piers 1 & 3
P36	5	86	6'-6"	" " " "
P37	7	28	19'-9"	" " " "
P38	3	13	6'-3"	Floor Slab Cols Pier 1
P39	3	14	5'-11"	" " " "
P40	6	19	5'-3"	Footings Col Piers 01 & 3
P43	6	12	7'-0"	" Pier 2
P44	9	18	17'-3"	Pier 2
P46	6	16	2'-0"	Footings Cols. Pier 1 & 3

✓MCR

OVERPASS NO. 2.
SUPERSTRUCTURE
BENT BARS



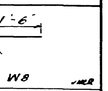
All dimensions to center line of bars

Mark	Size	Number	Length	Location
E1	#5	210	39'-4"	Slab
E8	#4	144	8'-3"	curb
E9	"	144	12'-10"	sidewalk
E10	"	144	5'-4"	Curb Rail Parapet
E11	"	144	6'-0"	S.W. " "
E16	#3	10	3'-10"	Curb @ Lights

STRAIGHT BARS

E2	#5	428	38'-6"	Slab
E3	#4	60	20'-0"	Pier Panels
E4	"	365	20'-0"	Slab, all Panels
E5	"	79	21'-10"	Slab A
E6	"	128	13'-0"	Slab B
E7	"	79	19'-0"	Slab C
E12	"	79	15'-0"	Slab D
E13	#4	60	15'-8"	Sidewalk, Curb, Parapet
E14	#6	24	7'-6"	Abut. Diaphragm

OVERPASS NO. 2
ABUTMENTS NO. 1 & 2
BENT BARS



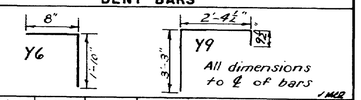
✓MCR

MARK	SIZE	NO	LENGTH	LOCATION
W14	#4	68	5'-2"	Abutments 1 & 2
W8	#8	32	3'-0"	"

STRAIGHT BARS

MARK	SIZE	NO.	LENGTH	LOCATION
W1	#6	14	37'-0"	Abuts. 1 & 2
W2	#6	78	6'-8"	" "
W3	#6	8	11'-0"	" "
W4	#6	20	3'-6"	" "
W5	#6	8	13'-0"	" "
W6	#5	50	6'-3"	" "
W7	#4	10	37'-0"	" "
W9	#5	56	10'-6"	" "
W10	#6	14	37'-0"	" "
W11	#4	36	4'-10"	" "
W12	#5	104	11'-3"	" "
W13	#4	52	11'-2"	" "
W15	#4	16	2'-6"	" "
W16	#6	24	6'-0"	" "

OVERPASS NO. 2
APPROACH RDY. SLAB-SIDEWALK SLAB & CURB
BENT BARS



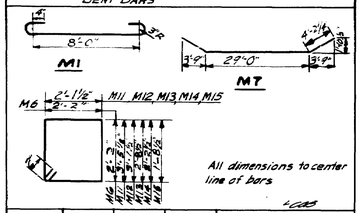
✓MCR

MARK	SIZE	NO.	LENGTH	LOCATION
Y6	#4	16	2'-6"	Approach Slab to S.W. Curb
Y9	#6	18	6'-5"	Wall to curb

STRAIGHT BARS

MARK	SIZE	NO.	LENGTH	LOCATION
Y1	#7	236	14'-6"	Approach Slab
Y2	#5	36	31'-0"	" "
Y3	#4	76	3'-0"	Sidewalk Slab
Y4	#4	16	16'-9"	" "
Y5	#4	10	16'-6"	Sidewalk Curb
Y7	#4	16	2'-4"	" "
Y8	#4	6	10'-6"	Curb
Y10	#5	18	2'-6"	Wall to curb

OVERPASS NO. 2.
PIERS NO. 1 & 2
BENT BARS



All dimensions to center line of bars

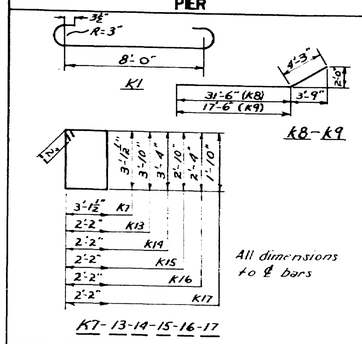
✓CAB

Mark	Size	Number	Length	Location
M1	#6	156	10'-3"	Pier Footings
M6	#4	111	9'-0"	Pier Columns
M7	#9	8	37'-5"	Pier Caps
M11	#4	120	11'-6"	" "
M12		8	10'-10"	" "
M13		8	10'-0"	" "
M14		8	9'-0"	" "
M15		8	8'-0"	" "

STRAIGHT BARS

M2	#8	96	5'-0"	Pier Footings
M4	#8	48	21'-11"	Pier #1 Columns
M5	#8	48	20'-10"	Pier #2 Columns
M8	#0	6	29'-0"	Pier Caps
M9	#9	4	32'-9"	" "
M10	#9	18	36'-6"	" "

OVERPASS NO. 1
PIER



BENT BARS

Mark	Size	No.	Length	Location
K1	#6	80	10'-2"	Footings
K7	#4	68	12'-10"	Columns
K8	#11	8	35'-9"	Cap
K9	#11	8	21'-9"	"
K13	#4	96	12'-4"	"
K14	#4	4	11'-4"	"
K15	#4	4	10'-4"	"
K16	#4	4	9'-4"	"
K17	#4	4	8'-4"	"

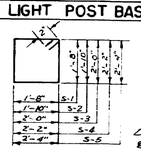
STRAIGHT BARS

K2	#9	96	5'-0"	Footings to Columns
K3	#9	24	20'-6"	Column
K4	#9	24	20'-0"	"
K5	#9	24	19'-6"	"
K6	#9	24	19'-0"	"
K10	#11	16	28'-6"	Cap
K11	#6	4	26'-9"	"
K12	#6	4	28'-6"	"
K18	#6	84	2'-0"	Columns to Walls
K19	#6	42	10'-0"	Walls (Hor.)
K20	#6	8	5'-6"	" (Vert)
K21	#6	8	5'-8"	" "
K22	#6	6	5'-10"	" "
K23	#6	8	6'-2"	" "
K24	#6	8	6'-4"	" "
K25	#6	6	6'-6"	" "
K26	#6	8	6'-10"	" "
K27	#6	8	7'-0"	" "
K28	#6	6	7'-2"	" "

✓C.S.A.

LIGHT POST BASES

✓CMH



BENT BARS

Mark	Size	No	Length	Location
S-1	#3	98	7'-0"	Light Post Base
S-2	#3	49	7'-8"	" "
S-3	#3	49	8'-8"	" "
S-4	#3	49	9'-0"	" "
S-5	#3	49	9'-8"	" "

STRAIGHT BARS

Mark	Size	No.	Length	Location
S-6	#6	196	6'-1"	Light Post Base

OVERPASS NO. 1
APPROACH SLABS
STRAIGHT BARS

MARK	SIZE	No	LENGTH	LOCATION
Z1	#5	28	21'-11"	Slab at Abut. No. 1
Z2		6	19'-9"	"
Z3		8	19'-6"	"
Z4		24	18'-0"	Slab at Abut. No. 2
Z5		6	16'-10"	"
Z6		6	13'-0"	"
Z7	#7	272	14'-6"	Slabs at Abuts. No. 1 & 2
Z8		6	5'-0"	Slab at Abut. No. 1
Z9		8	7'-0"	Slab at Abut. No. 2

✓MCR

CONCRETE PEDESTALS

Mark	Size	No.	Length	Location
PC	#4	496	4'-3"	Conc. Pedestals for Alum. Rail

✓MCR

LINE POST BASES

Mark	Size	No	Length	Location
PB	#4	176	2'-9"	All Line Post Bases

L.W.S.

CONCRETE MEDIAN WALL

Mark	Size	No.	Length	Location
V1	#4	64	24'-6"	All Wall Panels
V2	#5	272	5'-3"	do
V3	#5	272	1'-3"	do
V4	#4	8	5'-0"	Wall Panel adjacent to pier

V.H.

DESIGN - LANGFORD
TRACE - GARDNER
CHECK - MCR & As Noted

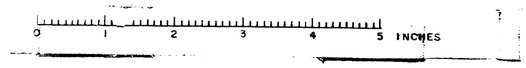
BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
REINFORCING STEEL

SHEET 123 OF 166 AUGUSTA, MAINE OCT. 1957

76-123



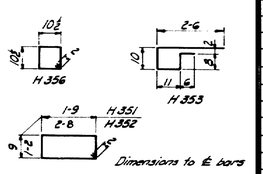
I-895-3(4) 50

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~I-895-3(4)~~ 50	124	166

OVERPASS NO. 1 - SPAN NO. 1 - SUPERSTRUCTURE

MARK	SIZE	NO.	LENGTH	LOCATION
H1	#5	2	2-9	Slab
H2	"	"	3-2	"
H3			3-7	
H4			4-0	
H5			4-4	
H6			4-9	
H7			5-2	
H8			5-7	
H9			6-0	
H10			6-4	
H11			6-9	
H12			7-2	
H13			7-7	
H14			8-0	
H15			8-4	
H16			8-9	
H17			9-2	
H18			9-7	
H19			10-0	
H20			10-4	
H21			10-9	
H22			11-2	
H23			11-7	
H24			12-0	
H25			12-4	
H26			12-9	
H27			13-2	
H28			13-7	
H29			14-0	
H30			14-5	
H31			14-10	
H32			15-3	
H33			15-7	
H34			16-0	
H35			16-5	
H36			16-10	
H37			17-3	
H38			17-7	
H39			18-0	
H40			18-5	
H41			18-10	
H42			19-3	
H43			19-8	
H44			20-0	
H45			20-5	
H46			20-10	
H47			21-3	
H48			21-8	
H49			22-0	
H50		2	22-5	
H51		One	22-10	
H52		"	23-3	
H53			23-8	
H54			24-0	
H55			24-5	
H56			24-10	
H57		One	25-3	
H58		III	19-8	
H59		104	22-6	
H60		One	4-6	
H61		"	4-11	
H62			5-4	
H63			5-9	
H64			6-1	
H65			6-6	
H66			6-11	
H67			7-4	
H68			7-9	
H69			8-1	
H70			8-6	
H71			8-11	
H72			9-4	
H73			7-9	
H74			10-1	
H75			10-6	
H76			10-11	
H77	"	"	11-4	"
H78	#5	One	11-9	Slab
H79	#5	One	12-2	Slab
H80	"	"	12-6	"
H81			12-11	
H82			13-4	
H83			13-9	
H84			14-2	
H85			14-6	
H86			14-11	
H87			15-4	
H88			15-9	
H89			16-2	
H90			16-7	
H91			17-0	
H92			17-4	
H93			17-9	
H94			18-2	
H95			18-7	
H96			19-0	
H97			19-4	
H98			19-9	
H99			20-2	
H100			20-7	
H101			21-0	
H102			21-4	
H103			21-10	
H104			22-2	
H105			22-7	
H106			23-0	
H107			23-4	
H108			23-10	
H109			24-2	
H110		1	24-7	
H111		One	25-0	
H112		2	25-2	
H113		3	26-0	
H114		"	25-7	
H115			25-4	
H116			25-0	
H117			24-9	
H118			24-6	
H119			24-3	
H120			24-0	
H121			23-9	
H122			23-6	
H123			23-3	
H124			23-0	
H125			22-9	
H126			22-6	
H127			22-3	
H128			22-0	
H129			21-9	
H130			21-6	
H131			21-3	
H132			21-0	
H133			20-10	
H134			20-9	
H135			20-8	
H136			20-4	
H137			20-2	
H138			20-0	
H139			19-10	
H140			19-8	
H141		1	19-4	
H142		3	19-3	
H143		One	4-6	
H144		"	4-11	
H145			5-4	
H146			5-8	
H147			6-2	
H148			6-5	
H149			6-9	
H150			7-4	
H151			7-9	
H152			8-2	
H153			8-6	
H154			8-11	
H155	"	"	9-4	"
H156	#5	One	9-9	Slab
H157	#5	One	10-2	Slab
H158	"	"	10-6	"
H159			10-11	
H160			11-4	
H161			11-9	
H162			12-2	
H163			12-6	
H164			12-11	
H165			13-4	
H166			13-9	
H167			14-2	
H168			14-6	
H169			15-0	
H170			15-4	
H171			15-9	
H172			16-2	
H173			16-7	
H174			17-0	
H175			17-4	
H176			17-9	
H177			18-2	
H178			18-7	
H179			19-0	
H180			19-4	
H181			19-9	
H182			20-5	
H183			20-7	
H184			21-0	
H185			21-3	
H186		"	21-8	
H187		One	22-3	
H188		2	22-6	
H189		3	23-3	
H190		"	22-9	
H191			22-6	
H192			22-2	
H193			21-11	
H194			21-8	
H195			21-5	
H196			21-2	
H197			20-11	
H198			20-8	
H199			20-5	
H200			20-2	
H201			19-11	
H202			19-8	
H203			19-5	
H204			19-2	
H205			18-11	
H206			18-8	
H207			18-5	
H208			18-2	
H209			18-0	
H210			17-11	
H211			17-10	
H212			17-6	
H213			17-4	
H214			17-2	
H215			17-0	
H216			16-10	
H217		"	16-6	
H218		3	16-5	
H219		One	18-6	
H220		"	18-2	
H221			17-9	
H222			17-3	
H223			16-9	
H224			16-6	
H225			16-3	
H226			16-0	
H227			15-8	
H228			15-3	
H229			14-9	
H230			14-6	
H231			14-0	
H232			13-9	
H233	"	"	13-6	"
H234	#5	One	13-3	Slab
H235	#5	One	12-9	Slab
H236	"	"	12-6	"
H237			12-3	
H238			11-9	
H239			11-6	
H240			11-3	
H241			10-9	
H242			10-6	
H243			10-3	
H244			9-9	
H245			9-6	
H246			9-3	
H247			8-9	
H248			8-6	
H249			8-3	
H250			7-9	
H251			7-6	
H252			21-4	
H253			21-0	
H254			20-7	
H255			20-1	
H256			19-7	
H257			19-4	
H258			19-1	
H259			18-10	
H260			18-6	
H261			18-1	
H262			17-7	
H263			17-4	
H264			16-10	
H265			16-7	
H266			16-4	
H267			16-1	
H268			15-7	
H269			15-4	
H270			15-1	
H271			14-7	
H272			14-4	
H273			14-1	
H274			13-7	
H275			13-4	
H276			13-1	
H277			12-7	
H278			12-4	
H279			12-1	
H280			11-7	
H281		5	11-4	
H282		one	11-1	
H283		2	10-7	
H284		2	24-10	
H285		"	24-5	
H286			24-0	
H287			23-8	
H288			23-3	
H289			22-10	
H290			22-6	
H291			22-1	
H292			21-8	
H293			21-3	
H294			20-11	
H295			20-6	
H296			20-2	
H297			19-9	
H298			19-4	
H299			19-0	
H300			18-6	
H301			18-2	
H302			17-9	
H303			17-4	
H304			17-0	
H305			16-7	
H306			16-2	
H307			15-10	
H308			15-5	
H309			15-0	
H310			14-8	
H311		1	14-3	
H312	#5	2	13-10	Slab
H313	#5	2	13-5	Slab
H314	"	"	13-1	"
H315			12-8	
H316			12-3	
H317			11-10	
H318			11-6	
H319			11-1	
H320			10-9	
H321			10-4	
H322			9-11	
H323			9-6	
H324			9-2	
H325			8-9	
H326			8-4	
H327			8-0	
H328			7-7	
H329			7-2	
H330			6-9	
H331			6-5	
H332			6-0	
H333			5-7	
H334			5-3	
H335			4-10	
H336			4-5	
H337			4-0	
H338		"	3-7	
H339		2	3-3	
H340		22	8-0	
H341		50	40-0	
H342		3	36-0	
H343		9	37-0	
H344		17	38-0	
H345		9	39-0	"
H346	#5	12	35-0	Slab
H347	#4	21	18-8	Curb
H348*	#4	7	18-6	Curb
H349*	#4	7	17-0	Curb
H350*	#4	21	17-8	Curb
H354	#6	9	11-4	End Diaph.
H355	#6	6	12-4	End Diaph.

BENT BARS

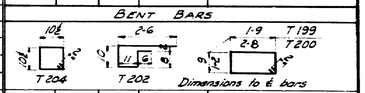


MARK	SIZE	NO.	LENGTH	LOCATION
H351	#4	114	5-4	Curb
H352	#4	114	8-0	Curb
H353	#4	47	5-5	End Diaph.
H356	#3	5	3-10	@ Light Post

OVERPASS NO. 1 - SPAN NO. 2 - SUPERSTRUCTURE

MARK	SIZE	NO.	LENGTH	LOCATION
T1	#5	6	2-8	Slab
T2	"	2	3-3	"
T3		"	3-7	
T4			3-11	
T5			4-3	
T6			4-8	
T7			4-11	
T8			5-4	
T9			5-8	
T10			6-1	
T11			6-4	
T12			6-9	
T13			7-1	
T14			7-5	
T15			7-9	
T16			8-2	
T17			8-6	
T18			8-11	
T19			9-2	
T20			9-7	
T21			9-11	
T22			10-3	
T23			10-7	
T24			10-11	
T25			11-3	
T26			11-8	
T27			12-0	
T28			12-5	
T29			12-9	
T30			13-1	
T31			13-5	
T32			13-9	
T33			14-2	
T34			14-6	
T35			14-11	
T36			15-2	
T37			15-7	
T38			15-11	
T39			16-3	
T40			16-7	
T41			16-11	
T42			17-3	
T43			17-8	
T44			18-0	
T45			18-4	
T46			18-8	
T47			19-1	
T48			19-5	
T49			19-9	
T50			20-1	
T51			20-5	
T52			20-10	
T53			21-2	
T54			21-6	
T55			21-10	
T56			22-3	
T57			22-7	
T58			22-11	
T59			23-3	
T60			23-7	
T61			24-0	
T62			24-4	
T63			24-8	
T64			25-0	
T65			25-5	
T66			25-9	
T67			26-1	
T68			26-5	
T69			26-9	
T70			27-2	
T71			27-6	
T72			27-10	
T73			28-3	
T74			28-7	
T75			28-11	
T76			29-3	
T77	"	"	29-7	"
T78	#5	2	30-0	Slab
T79	#5	2	30-4	Slab
T80	"	"	30-8	"
T81			31-0	
T82			31-5	
T83			31-9	
T84			32-1	
T85			32-5	
T86			32-9	
T87			33-2	
T88		"	33-6	
T89		2	33-10	
T90		10	34-8	
T91		"	34-6	
T92			34-4	
T93			34-2	
T94			34-1	
T95			34-0	
T96			33-11	
T97			33-10	
T98		"	33-9	
T99		10	33-8	
T100		20	33-7	
T101		60	33-6	
T102		6	32-6	
T103		2	32-3	
T104		"	31-9	
T105			31-5	
T106			31-0	
T107			30-6	
T108			30-4	
T109			30-0	
T110			29-8	
T111			29-3	
T112			29-0	
T113			28-7	
T114			28-3	
T115			27-10	
T116			27-6	
T117			27-3	
T118			26-9	
T119			26-6	
T120			26-2	
T121			25-11	
T122			25-6	
T123			25-3	
T124			24-10	
T125			24-6	
T126			24-3	
T127			24-0	
T128			23-7	
T129			23-2	
T130			22-9	
T131			22-4	
T132			22-0	
T133			21-9	
T134			21-5	
T135			21-1	
T136			20-9	
T137			20-6	
T138			20-3	
T139			19-10	
T140			19-5	
T141			19-2	
T142			18-10	
T143			18-6	
T144			18-2	
T145			17-10	
T146			17-6	
T147			17-2	
T148			16-10	
T149			16-6	
T150			16-3	
T151			16-0	
T152			15-7	
T153			15-3	
T154			15-0	
T155	"	"	14-9	"
T156	#5	2	14-4	Slab
T157	#5	2	14-0	Slab
T158	"	"	13-9	"
T159			13-5	
T160			13-1	
T161			12-9	
T162			12-5	
T163			12-0	
T164			11-9	
T165			11-6	
T166			11-3	
T167			10-10	
T168			10-6	
T169			10-3	
T170			9-10	
T171			9-6	
T172			9-3	
T173			8-10	
T174			8-6	
T175			8-3	
T176			8-0	
T177			7-9	
T178			7-6	
T179			7-1	
T180			6-10	
T181			6-6	
T182			6-3	
T183			5-10	
T184			5-6	
T185			5-3	
T186			4-10	
T187			4-6	
T188			4-3	
T189			4-0	
T190			3-9	
T191			3-4	
T192			3-0	
T193		1	2-9	
T194	#5	123	30-0	Slab
T195*	#4	7	20-8	Curb
T196*	#4	7	9-0	Curb
T197*	#4	61	15-8	Curb
T198*	#4	2	18-0	Curb
T199	#4	130	5-4	Curb
T200	#4	132	8-0	Curb
T201	#6	12	12-6	End Diaph.
T202	#4	48	5-5	End Diaph.
T203	#6	20	8-0	Slab
T204	#3	5	3-10	@ Light Post

BENT BARS



* Both Spans - Cut or bend in Field.

DESIGN - HAMILTON
TRACE - CLARK
CHECK - C.S.H.

BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

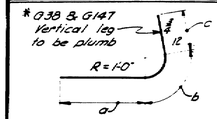
REINFORCING STEEL

SHEET 124 OF 166 AUGUSTA, MAINE OCT. 1957

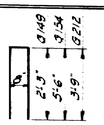
76-124

0 1 2 3 4 5 INCHES

ABUTMENT No. 1 - OVERPASS No. 1

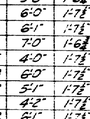


Bar	a	b	c
* G38	3'-0"	1'-6⅜"	4'-2⅛"
G95	6'-0"	1'-7⅛"	4'-2⅛"
G148	6'-1"	1'-7⅛"	4'-2⅛"
* G147	7'-0"	1'-6⅜"	4'-2⅛"
G165	4'-0"	1'-7⅛"	3'-8⅛"
G168	6'-0"	1'-7⅛"	4'-2⅛"
G172	5'-1"	1'-7⅛"	3'-11⅛"
G175	4'-2"	1'-7⅛"	3'-8⅛"
G222	6'-1"	1'-7⅛"	4'-2⅛"
G229	5'-2"	1'-7⅛"	3'-11⅛"
G232	4'-2"	1'-7⅛"	3'-8⅛"
G236	4'-0"	1'-7⅛"	3'-8⅛"



G149, 154, 212

G5

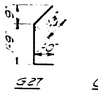


G3

G151, 153

G35

G152, 158



G27

G15

G16

NOTE: Dimensions to ℄ bars.

BENT BARS

Mark	Size	No.	Length	Location
G3	#5	49	13'-8"	Abutment
G5	#5	46	9'-7"	"
G15	#5	23	4'-1"	"
G16	#5	23	5'-3"	"
G27	#5	22	4'-0"	"
G35	#5	61	3'-0"	" - App. Slab Seat
G38	#11	90	14'-3"	" - Footing
G95	#11	23	11'-10"	" - East Wing Footing
G143	#11	13	11'-11"	" - West Wing Footing
G147	#11	One	12'-5"	" " "
G148	#4	112	5'-2"	" - East & West Walls
G151	#6	117	6'-5"	" " "
G152	#6	One	9'-9"	" - West Wing Wall
G153	#6	One	6'-5"	" " "
G154	#4	2	11'-8"	" - East & West Wings
G158	#6	One	9'-9"	" - East Wing Wall
G165	#9	11	9'-4"	" - East Wall Footing
G168	#11	22	11'-10"	" " "
G172	#10	18	10'-8"	" " "
G175	#8	18	9'-6"	" " "
G212	#4	a	8'-2"	" - East & West Walls
G222	#11	131	11'-11"	" - West Wall Footing
G229	#10	18	10'-11"	" " "
G232	#9	18	9'-6"	" " "
G236	#9	11	9'-4"	" " "

STRAIGHT BARS

Mark	Size	No.	Length	Location
G1	#6	52	14'-0"	Abutment
G2	#9	95	14'-0"	"
G4	#6	53	13'-6"	"
G6	#6	One	7'-0"	"
G7	#6	2	4'-6"	"
G8	#5	One	13'-6"	"
G9	#5	3	17'-0"	"
G10	#5	25	17'-10"	"
G11	#5	13	13'-6"	"
G12	#5	42	28'-10"	"
G13	#5	26	17'-0"	"
G14	#5	14	20'-6"	"
G17	#5	One	16'-6"	"
G18	#5	3	20'-0"	"
G19	#6	11	5'-3"	" - East Wing
G20	#11	12	3'-0"	" " "
G21	#11	11	9'-0"	" " "
G22	#6	11	1'-0"	" " "
G23	#6	12	11'-0"	" " "
G24	#6	3	3'-6"	" " "
G25	#5	29	14'-6"	" " "
G26	#5	13	12'-0"	" " "
G28	#6	5	12'-6"	" - West Wing
G29	#6	7	12'-6"	" " "
G30	#6	5	19'-0"	" " "
G31	#11	7	18'-0"	" " "
G32	#11	6	9'-0"	" " "
G33	#5	41	5'-4"	" " "
G34	#5	4	6'-6"	" " "
G36	#7	50	13'-6"	" - Footing
G37	#6	42	5'-0"	" "
G39	#6	21	28'-10"	" "
G40	#6	159	4'-0"	" & Walls - Footing

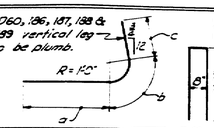
STRAIGHT BARS

Mark	Size	No.	Length	Location
G146	#10	27	15'-6"	East Wall Footing
G147	#6	14	11'-0"	" " "
G149	#6	24	11'-10"	" " "
G170	#8	21	13'-6"	" " "
G171	#6	11	9'-0"	" " "
G173	#6	21	10'-6"	" " "
G174	#8	21	11'-6"	" " "
G176	#6	11	8'-0"	" " "
G177	#6	18	10'-6"	" " "
G178	#6	11	10'-2"	" " "
G179	#6	11	7'-6"	" " "
G180	#6	17	11'-0"	East Wall Footing
G181	#5	5	9'-11"	East Wall
G182	#5	41	18'-10"	" "
G183	#8	8	18'-0"	" "
G184	#11	12	18'-0"	" "
G185	#11	11	9'-0"	" "
G186	#6	8	11'-0"	" "
G187	#6	12	11'-0"	" "
G188	#6	6	13'-0"	" "
G189	#10	9	13'-0"	" "
G190	#10	8	6'-6"	" "
G191	#6	6	12'-0"	" "
G192	#6	9	12'-0"	" "
G193	#5	6	8'-6"	" "
G194	#5	12	19'-6"	" "
G195	#5	One	22'-0"	" "
G196	#5	2	22'-6"	" "
G197	#5	14	24'-6"	" "
G198	#6	6	9'-0"	" "
G199	#8	17	9'-0"	" "
G200	#6	6	12'-6"	" "
G201	#6	9	12'-6"	" "
G202	#6	7	7'-0"	" "
G203	#9	11	7'-0"	" "
G204	#6	-	10'-6"	" "
G205	#6	12	10'-6"	" "
G206	#6	One	7'-6"	" "
G207	#6	2	7'-0"	" "
G208	#6	One	6'-6"	" "
G210	#6	2	6'-0"	" "
G211	#5	2	6'-6"	East Wall
G213	#5	8	2'-3"	East & West Walls
G221	#10	136	15'-6"	West Wall footing
G223	#6	69	11'-0"	" "
G224	#6	24	23'-6"	" "
G225	#6	24	20'-6"	" "
G226	#6	24	17'-6"	" "
G227	#8	11	13'-6"	" "
G229	#6	11	9'-0"	" "
G230	#6	21	10'-6"	" "
G231	#8	21	11'-6"	" "
G233	#6	11	8'-0"	" "
G234	#6	18	10'-6"	" "
G235	#6	11	10'-2"	" "
G237	#6	11	7'-6"	" "
G238	#6	17	11'-0"	West Wall Footing
G239	#5	47	23'-6"	West Wall
G240	#6	45	18'-0"	" "
G241	#11	66	18'-0"	" "
G242	#11	63	9'-0"	" "
G243	#6	45	18'-0"	" "
G244	#6	66	13'-0"	" "
G245	#5	47	20'-6"	" "
G246	#5	6	15'-6"	" "
G247	#5	41	24'-6"	" "
G248	#6	6	13'-0"	" "
G249	#10	9	13'-0"	" "
G250	#10	8	6'-6"	" "
G251	#6	6	13'-0"	" "
G252	#6	9	13'-0"	" "
G253	#5	6	8'-6"	" "
G254	#5	12	19'-6"	" "
G255	#5	One	22'-0"	" "
G256	#5	16	24'-6"	" "
G257	#6	6	9'-0"	" "
G258	#8	17	9'-0"	" "
G259	#6	6	13'-0"	" "
G260	#6	9	13'-0"	" "
G261	#6	7	7'-0"	" "
G262	#9	11	7'-0"	" "
G263	#6	7	11'-0"	" "
G264	#6	12	11'-0"	" "
G265	#6	One	7'-6"	" "
G266	#6	2	6'-0"	" "
G267	#6	2	5'-6"	" "
G270	#5	2	6'-6"	West Wall
G69	#10	One	7'-2"	Abut. - East Wing Footing

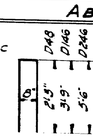
STRAIGHT BARS

Mark	Size	No.	Length	Location
G140			16'-6"	" " "
G141		One	17'-0"	Abutment Footing
G142	#6	12	11'-0"	Abut. Footing - West Wing
G144	#10	29	15'-6"	" " " " "
G145	#6	24	13'-0"	" " " " "
G146	#11	One	6'-0"	" " " " "
G148	#11	One	7'-0"	" " " " "
G150	#5	123	2'-0"	Abut. - East & West Walls
G155	#5	2	8'-6"	" " - West Wing
G156	#5	One	7'-0"	" " "
G157	#5	2	6'-6"	" " "
G159	#5	One	13'-6"	" " - East Wing
G160	#5	2	13'-0"	" " "

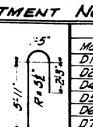
ABUTMENT No. 2 - OVERPASS No. 1



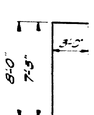
Bar	a	b	c
D3	5'-1"	1'-7⅛"	3'-10⅜"
D14	4'-2"	1'-7⅛"	3'-7⅛"
D30	3'-11"	1'-7⅛"	3'-7⅛"
D38	3'-8"	1'-7⅛"	3'-7⅛"
* D60	7'-8"	1'-6⅜"	3'-8⅛"
D126	5'-2"	1'-7⅛"	3'-10⅜"
D130	3'-11"	1'-7⅛"	3'-7⅛"
* D186	7'-1"	1'-6⅜"	3'-10⅛"
* D187	6'-7"	1'-6⅜"	3'-10⅛"
* D188	6'-1"	1'-6⅜"	3'-10⅛"
* D189	5'-7"	1'-6⅜"	3'-10⅛"



D48, 146, 246, 253

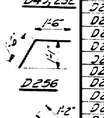


D227



D224, 239

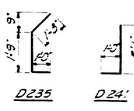
D49, 252



D256

D248, 251

D247



D235

D24:

D242

NOTE: Dimensions to ℄ bars

BENT BARS

Mark	Size	No.	Length	Location
D3	#10	65	10'-7"	East Wall - Footing
D14	#8	70	9'-5"	" " "
D30	#9	9	9'-2"	" " "
D38	#6	17	8'-11"	" " "
D48	#8	99	5'-2"	" " " & West Wall
D49	#6	91	6'-5"	" " " " "
D60	#9	63	12'-11"	Abutment Footing
D126	#10	31	10'-8"	" " - West
D130	#9	16	9'-2"	West Wall - footing
D146	#4	6	8'-2"	" " " & East Wall
D186	#10	One	12'-6"	Abutment Footing
D187	#10	One	12'-0"	" "
D188	#10	One	11'-6"	" "
D189	#10	One	11'-0"	" "
D224	#6	31	11'-0"	Abutment
D227	#6	34	9'-7"	"
D235	#5	19	4'-0"	"
D239	#6	7	10'-3"	"
D241	#5	17	4'-1"	"
D242	#5	17	6'-6"	"
D246	#6	2	11'-8"	" - West Wing Wall
D247	#6	One	2'-11"	" " "
D248	#6	One	9'-9"	" " "
D251	#6	One	8'-10⅝"	" - East "
D252	#6	One	6'-5"	" " "
D253	#6	One	11'-8"	" " "
D256	#5	50	3'-0"	" - App. Slab seat

STRAIGHT BARS

Mark	Size	No.	Length	Location
D213	#6	8	12'-0"	Abutment - East Wing Wall
D214	#6	6	12'-0"	" " " "
D215	#6	39	3'-6"	" " " "
D216	#4	6	9'-0"	" " " "
D217	#6	16	14'-0"	" - West " "
D218	#10	17	14'-0"	" " " "
D219	#10	16	7'-6"	" " " "
D220	#6	4	3'-6"	" " " "
D221	#6	16	12'-0"	" " " "
D222	#6	18	12'-0"	" " " "
D223	#6	37	12'-0"	"
D225	#8	23	12'-0"	"
D226	#6	17	12'-0"	"
D229	#5	4	24'-0"	"
D229	#5	32	24'-6"	"
D230	#5	12	20'-6"	"
D231	#5	One	17'-6"	"
D232	#5	3	24'-0"	"
D233	#5	29	22'-6"	" - West Wing Wall
D234	#5	12	18'-0"	" " " "
D236	#8	45	12'-0"	"
D237	#6	24	12'-0"	"
D238	#5	36	20'-6"	"
D240	#5	20	9'-6"	"
D243	#5	13	14'-0"	"
D244	#5	One	9'-6"	"
D245	#6	3	10'-0"	"
D249	#5	One	20'-6"	" - West Wing Wall
D250	#5	2	19'-6"	" " " "
D254	#5	One	9'-6"	" - East " "
D255	#5	2	12'-0"	" " " "

STRAIGHT BARS

Mark	Size	No.	Length	Location
D1	#8	82	13'-6"	Abut. & East Wall - Footing
D2	#6	42	10'-0"	East Wall Footing
D4	#6	21	26'-6"	" " "
D5	#6	130	4'-7"	Abut. & Walls
D6	#6	17	13'-0"	East Wall
D7	#10	25	13'-0"	" "
D8	#10	24	6'-6"	" "
D9	#6	17	12'-6"	" "
D10	#6	25	13'-0"	" "
D11	#5	40	24'-6"	" "
D12	#8	74	11'-6"	" " - Footing
D13	#5	38	9'-0"	" " "
D15	#6	18	28'-6"	" " "
D16	#6	18	8'-6"	" " "
D17	#6	25	9'-0"	" " "
D18	#8	71	9'-0"	" " "
D19	#6	25	13'-0"	" " "
D20	#6	36	13'-0"	" " "
D21	#5	36	28'-6"	" " "
D22	#5	5	6'-6"	" " "
D23	#5	6	15'-6"	" " "
D24	#5	6	26'-6"	" " "
D25	#5	One	28'-0"	" " "
D26	#5	2	30'-6"	" " "
D27	#5	14	31'-6"	" " "
D28	#6	11	10'-2"	" " - Footing
D29	#6	11	7'-6"	" " "
D31	#6	16	10'-6"	" " "
D32	#6	6	7'-0"	" " "
D33	#9	9	7'-0"	" " "
D34	#6	6	11'-0"	" " "
D35	#6	9	11'-0"	" " "
D36	#6	11	8'-10"	" " - Footing
D37	#6	11	6'-0"	" " "
D39	#6	12	11'-0"	" " "
D40	#6	8	11'-9"	" " "
D41	#6	11	11'-9"	" " "
D42	#5	2	6'-6"	" " "
D43	#6	One	7'-9"	" " "
D44	#6	2	7'-3"	" " "
D45	#6	One	6'-9"	" " "
D46	#6	2	6'-3"	" " "
D47	#6	2	5'-9"	" " "
D50	#5	98	2'-0"	" " - & West Wall
D51	#6	One	9'-6"	Abutment Footing
D52	#6	One	10'-6"	" "
D53	#9	One	9'-6"	" "
D54	#9	One	10'-0"	" "
D55	#9	One	10'-6"	" "
D56	#9	One	11'-0"	" "
D57	#6	38	11'-6"	" "
D58	#9	10	11'-6"	" "
D59	#6	30	5'-0"	" "
D60	#6	2	25'-6"	" "
D62	#6	2	25'-6"	" "
D63	#6	One	24'-3"	" "
D64	#8		2'-3"	" "
D65			2'-6"	" "
D66			2'-9"	" "
D67			3'-0"	" "
D68			3'-3"	" "
D69			3'-6"	" "
D70			3'-9"	" "
D71			4'-0"	" "
D72			4'-3"	" "
D73			4'-6"	" "
D74			4'-9"	" "
D75			5'-0"	" "
D76			5'-3"	" "
D77			5'-6"	" "
D78			5'-9"	" "
D79			6'-0"	" "
D80			6'-3"	" "
D81			6'-6"	" "
D82			6'-9"	" "
D83			7'-0"	" "
D84			7'-3"	" "
D85			7'-6"	" "
D86			7'-9"	" "
D87			8'-0"	" "
D88			8'-3"	" "
D89			8'-6"	" "
D90			8'-9"	" "
D91			9'-0"	" "
D92			9'-3"	" "
D93			9'-6"	" "
D94			9'-9"	" "
D95			10'-3"	" "
D96			10'-3"	" "
D97			10'-6"	" "
D98			10'-9"	" "
D99			11'-0"	" "
D100			11'-3"	" "
D101			11'-6"	" "
D102			11'-9"	" "
D103			12'-0"	" "
D104			12'-3"	" "
D105			12'-6"	" "
D106			12'-9"	" "
D107			13'-0"	" "
D108			13'-3"	" "
D109	#8		13'-6"	" "
D110	#6		2'-6"	" "
D111	#8		3'-0"	" "
D112	#6	One	3'-6"	Abutment Footing

STRAIGHT BARS

Mark	Size	No.	Length	Location
D113	#6	One	2'-0"	Abutment Footing
D114			4'-6"	" "
D115			5'-0"	" "
D116			5'-6"	" "
D117			6'-0"	" "
D118			6'-6"	" "
D119			7'-0"	" "
D120			7'-6"	" "
D121			8'-0"	" "
D122			8'-6"	" "
D123			9'-0"	" "
D124			9'-6"	" "
D125			10'-0"	" "
D127		One	8'-0"	Abutment - East Wing
D128		16	10'-2"	West Wall - Footing
D129		16	7'-0"	" " "
D131		15	15'-0"	" " "
D132	#6	11	7'-0"	" " "
D133	#9	16	7'-0"	" " "
D134	#6	11	10'-6"	" " "
D135	#6	16	10'-6"	" " "
D136	#6	One	7'-9"	" " "
D137	#6	2	7'-3"	" " "
D138	#6	One	6'-9"	" " "
D139	#6	2	6'-3"	" " "
D140	#6	2	5'-9"	" " "
D141	#5	9	19'-10"	" " "
D142	#5	2	19'-6"	" " "
D143	#5	One	17'-0"	" " "
D144	#5	12	14'-10"	" " "
D145	#5	2	6'-6"	" " "
D147	#5	2	19'-6"	" " "
D148	#5	8	2'-3"	" " & East Wall
D149	#5	3	19'-6"	" " "
D157	#10	One	2'-6"	Abutment - West Wing Footing
D158			2'-9"	" " " "
D159			3'-0"	" " " "
D160			3'-3"	" " " "
D161			3'-6"	" " " "
D162			3'-9"	" " " "
D163			4'-0"	" " " "
D164			4'-3"	" " " "
D165			4'-6"	" " " "
D166			4'-9"	" " " "
D167			5'-0"	" " " "
D168			5'-3"	" " " "
D169			5'-6"	" " " "
D170			5'-9"	" " " "
D171	#10	One	6'-0"	" " " "
D172	#6	2	5'-6"	" " " "
D173		One	6'-11"	" " " "
D174		2	8'-4"	" " " "
D175		One	9'-9"	" " " "
D176		2	11'-2"	" " " "
D177		One	12'-7"	" " " "
D178		2	14'-0"	" " " "
D179		One	13'-5"	" " " "
D180		2	16'-10"	" " " "
D181		One	18'-3"	" " " "
D182		2	19'-8"	" " " "
D183		One	21'-1"	" " " "
D184		2	22'-6"	" " " "
D185		18	20'-6"	" - Footing
D190		One	5'-0"	" " East Wing
D191			6'-0"	" " "
D192			7'-0"	" " "
D193			8'-0"	" " "
D194			9'-0"	" " "
D195			10'-0"	" " "
D196			4'-6"	" " "
D197			5'-0"	" " "
D198			5'-6"	" " "
D199			6'-0"	" " "
D200			6'-6"	" " "
D201			7'-0"	" " "
D202			7'-6"	" " "
D203			8'-0"	" " "
D204			3'-6"	" " "
D205			9'-0"	" " "
D206			9'-6"	" " "
D207		One	10'-0"	" " "
D208		20	14'-6"	" " "
D209	#6	One	16'-0"	" " "
D210	#10	8	13'-0"	" - East Wing Wall
D211	#6	6	13'-0"	" " "
D212	#10	7	6'-6"	" " "

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F-082-1(6)	125	166

DESIGN - RISSEL DET - A.H.R.
TRACE - CLARK
CHECK - Comt. B. Wentworth

BRIDGE NO.
SURVEY -
PLOT -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

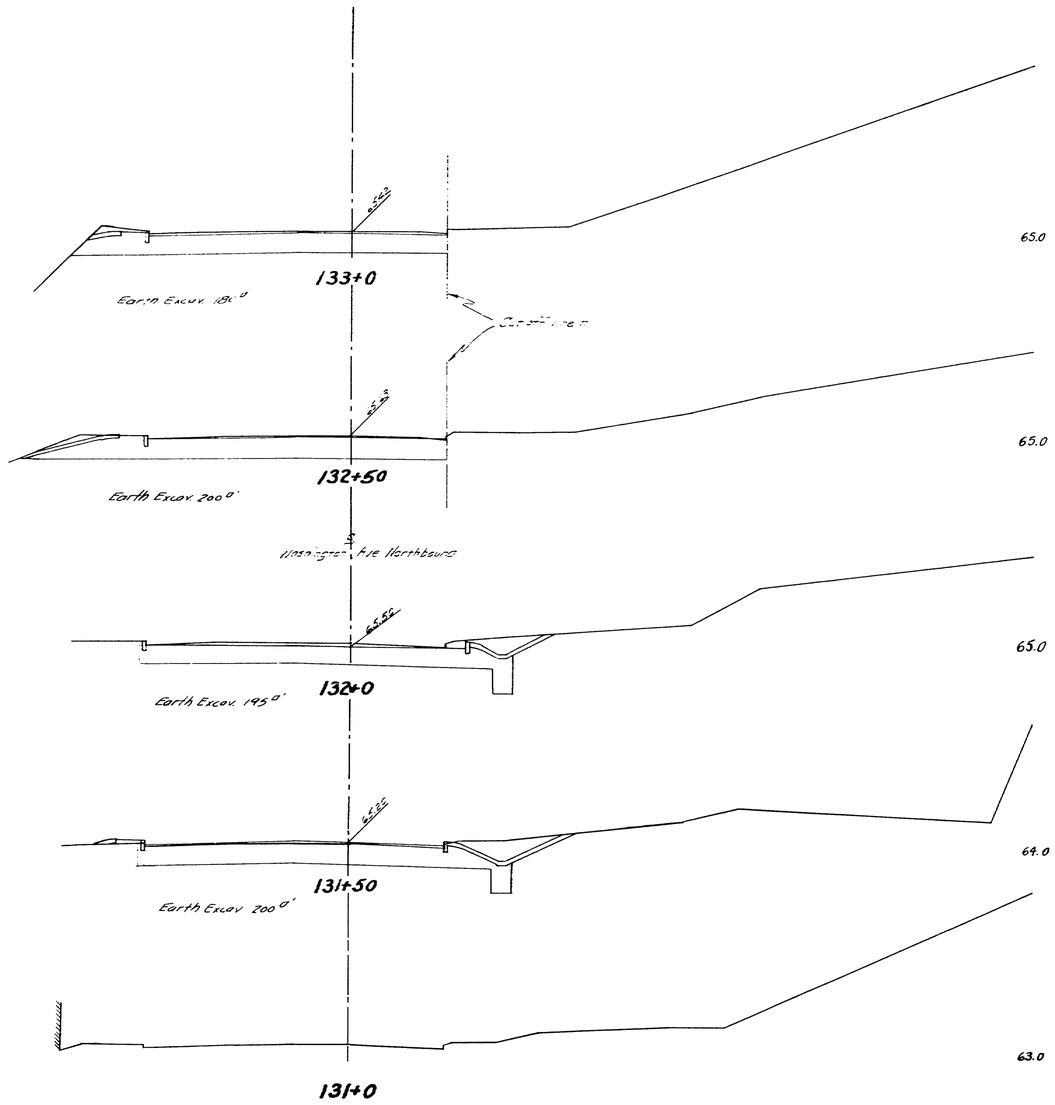
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

REINFORCING STEEL

SHEET 125 OF 166 AUGUSTA, MAINE OCT. 1957

76-125

0 1 2 3 4 5 INCHES



0 1 2 3 4 5 INCHES

DESIGN- BARNES
TRACE- Corbin
CHECK- MORRISON

BRIDGE NO.

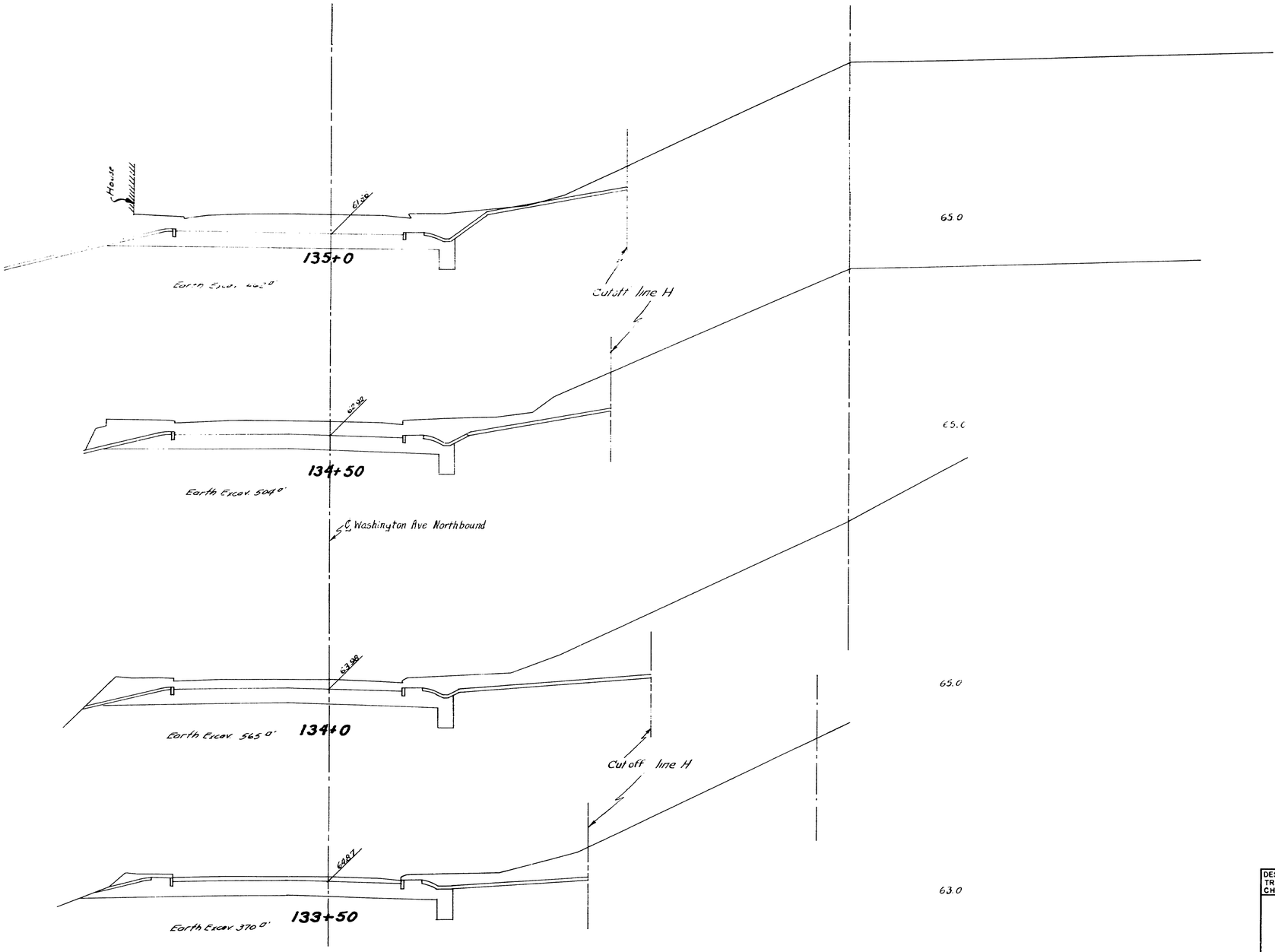
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 126 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-126

B P R REG. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
	MAINE	~~F-002-1(4)~~	127	166



0 1 2 3 4 5 INCHES

DESIGN- BARNES
TRACE- Corkin
CHECK- MORRISON

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

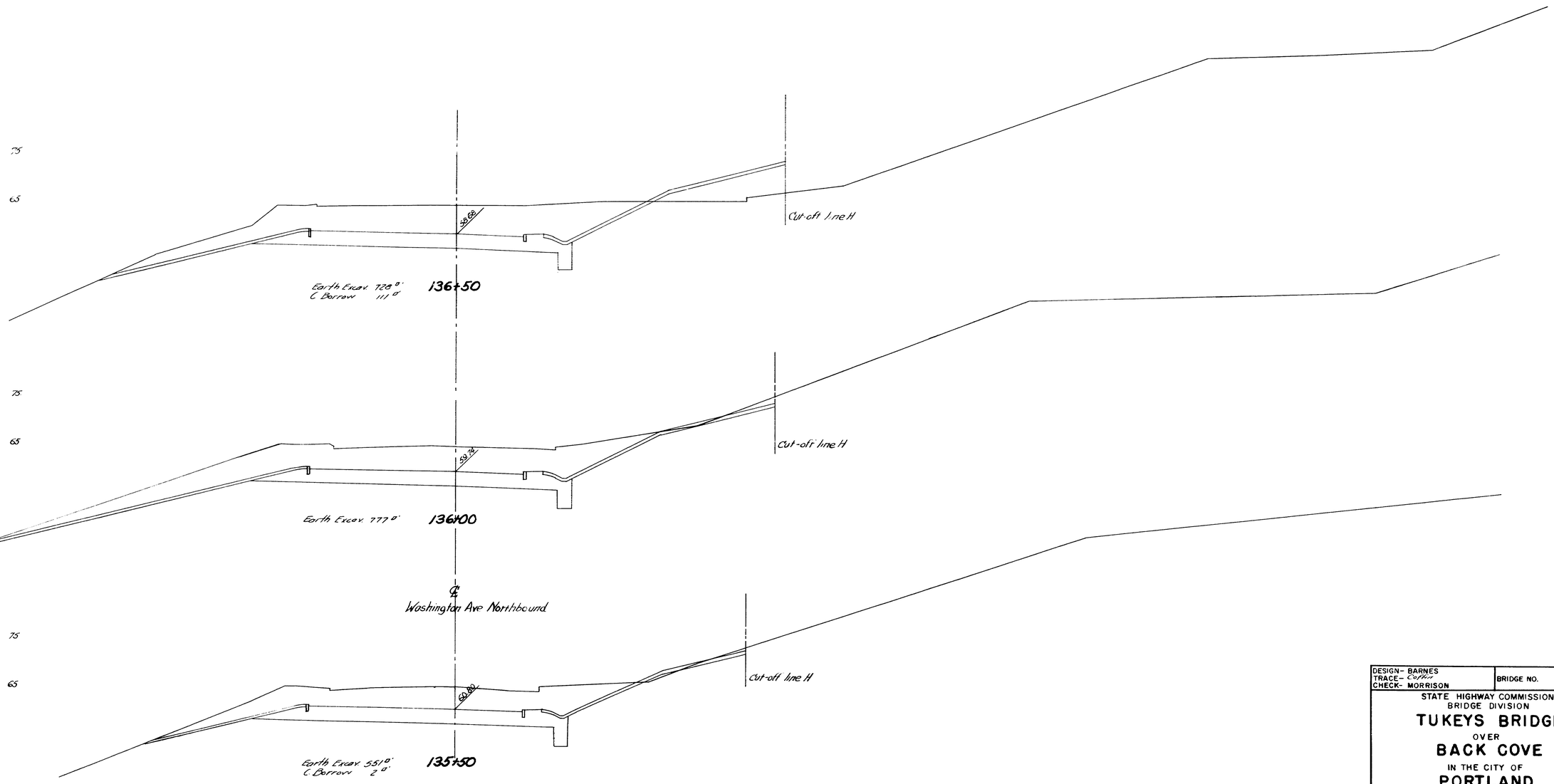
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 127 OF 166 AUGUSTA, MAINE, OCT. 1957

76-127

REG. | STATE | SHEET | NO.
MAIN | 128 | 166

F-895-3(4) 50



DESIGN- BARNES
TRACE- Coffin
CHECK- MORRISON

BRIDGE NO.

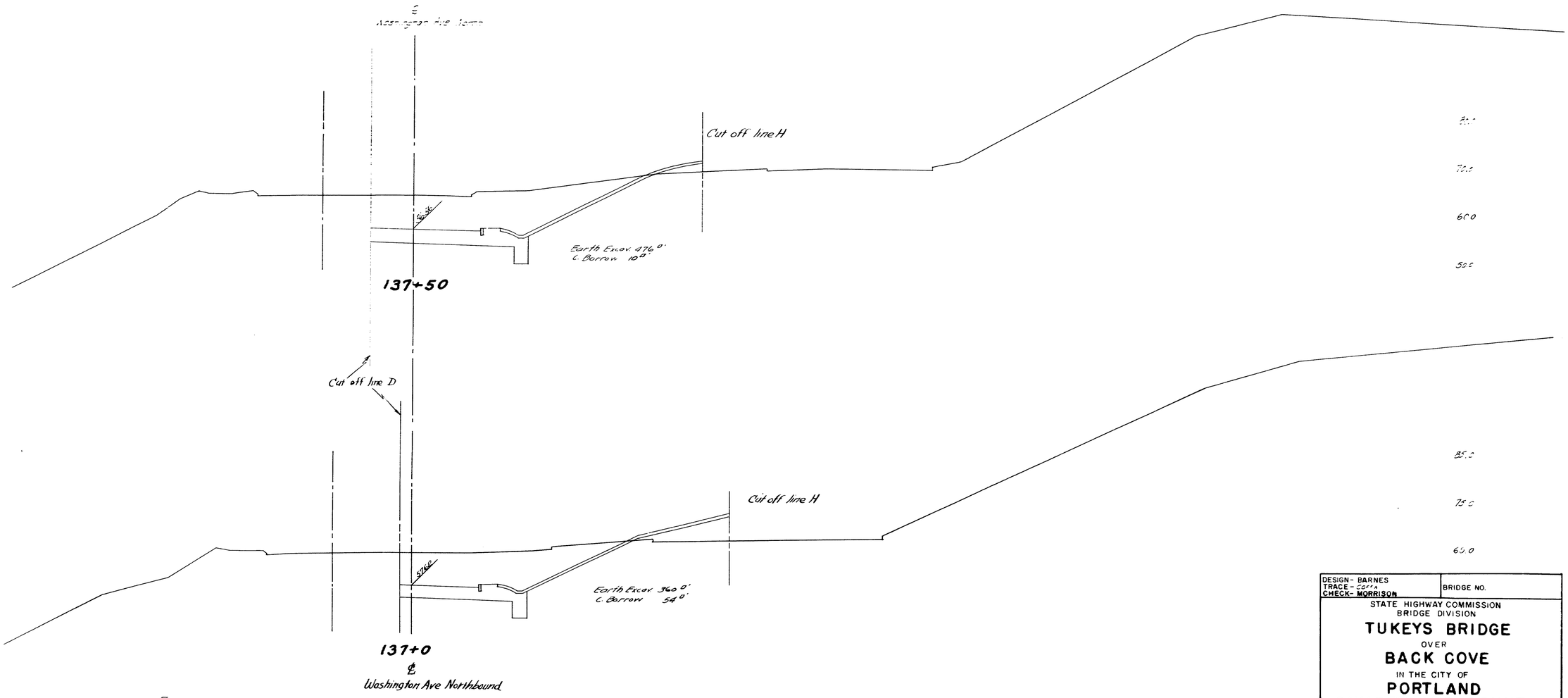
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 128 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-128

REF. NO. STATE ... SHEET ... TOTAL SHEETS
MAINE ~~3-002-H(4)~~ 129 166



0 1 2 3 4 5 INCHES

DESIGN- BARNES
TRACE- COFFIN
CHECK- MORRISON

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

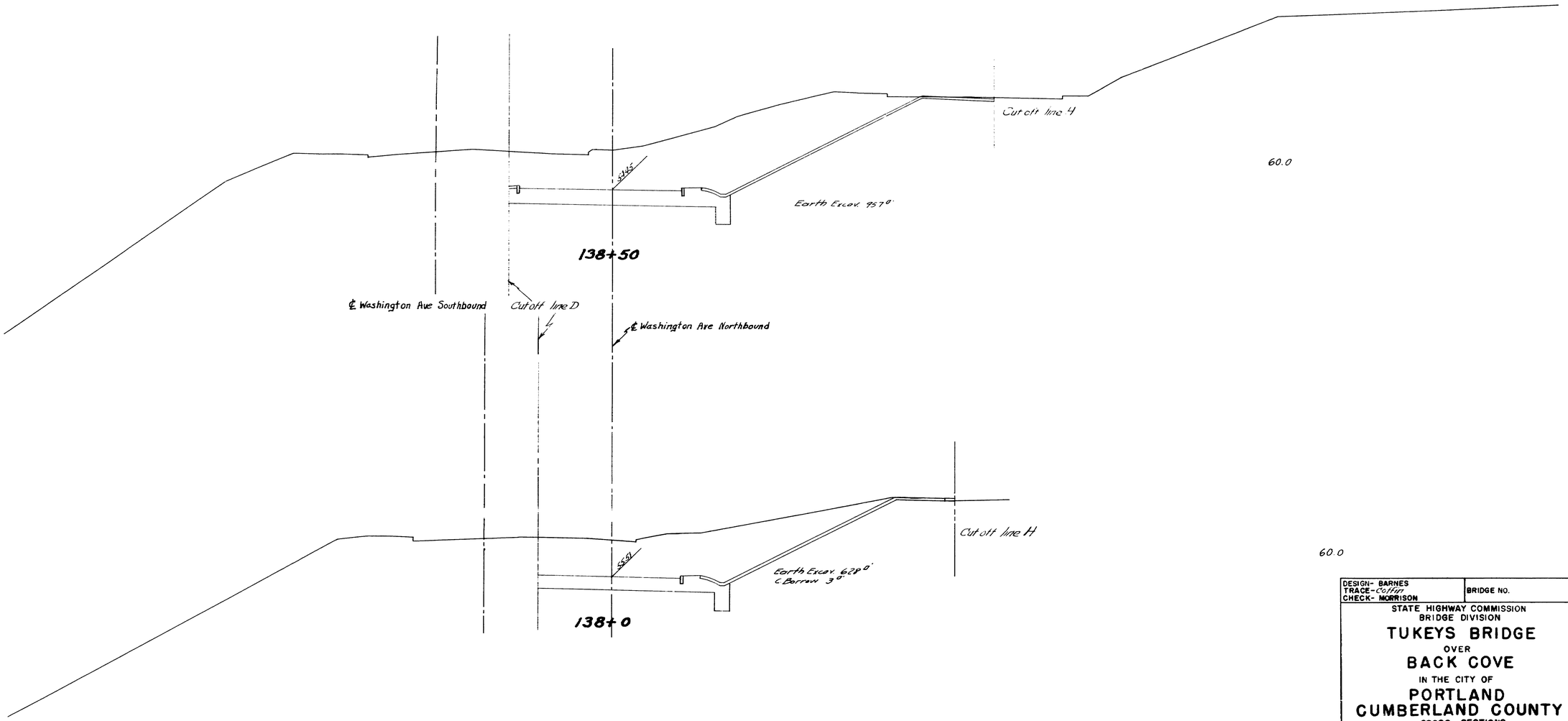
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 129 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-129

REG. NO.	STATE	ROAD	SHEET NO.	TOTAL SHEETS
	MAINE	~~F 002 (10)~~	130	166

I-895-3(4) 50



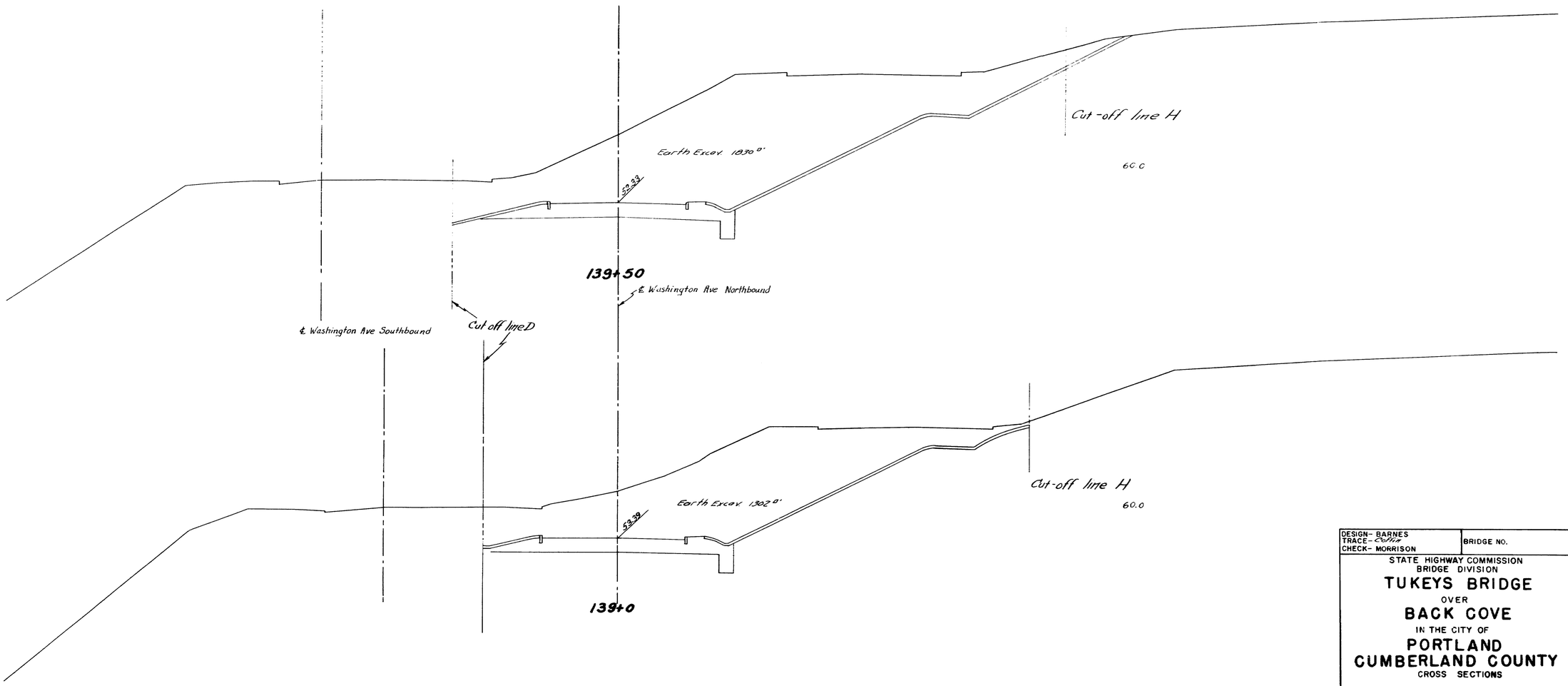
DESIGN- BARNES TRACE- CS/GM CHECK- MORRISON	BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 130 OF 166 AUGUSTA, MAINE. OCT. 1957

76-130



DESIGN- BARNES
TRACE- Coffin
CHECK- MORRISON

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

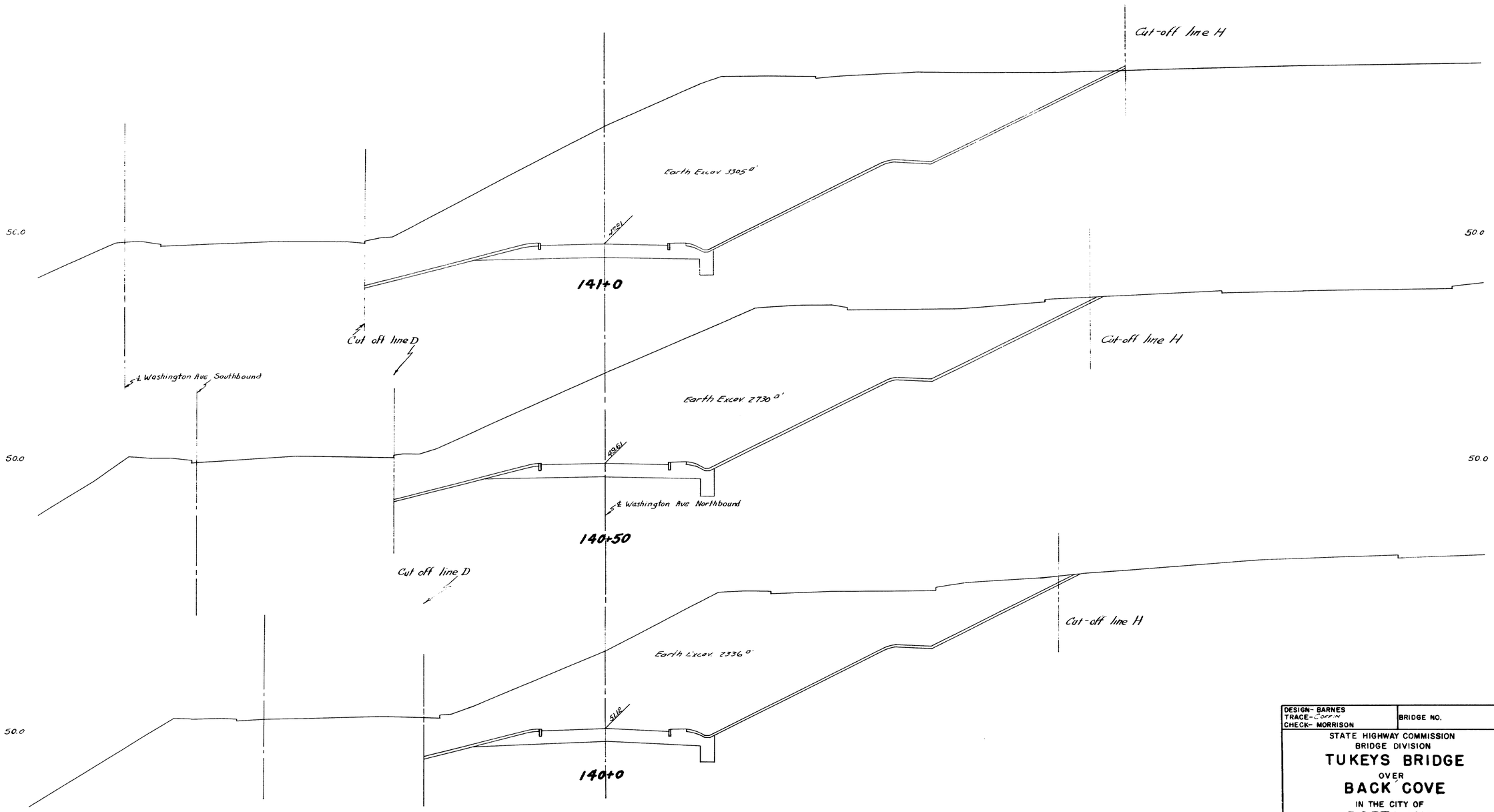
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 131 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-131

0 1 2 3 4 5 INCHES

REC. NO. [illegible] SHEETS
[illegible] 132 166
1" = 50'



0 1 2 3 4 5 INCHES

DESIGN- BARNES
TRACE- COFFIN
CHECK- MORRISON

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

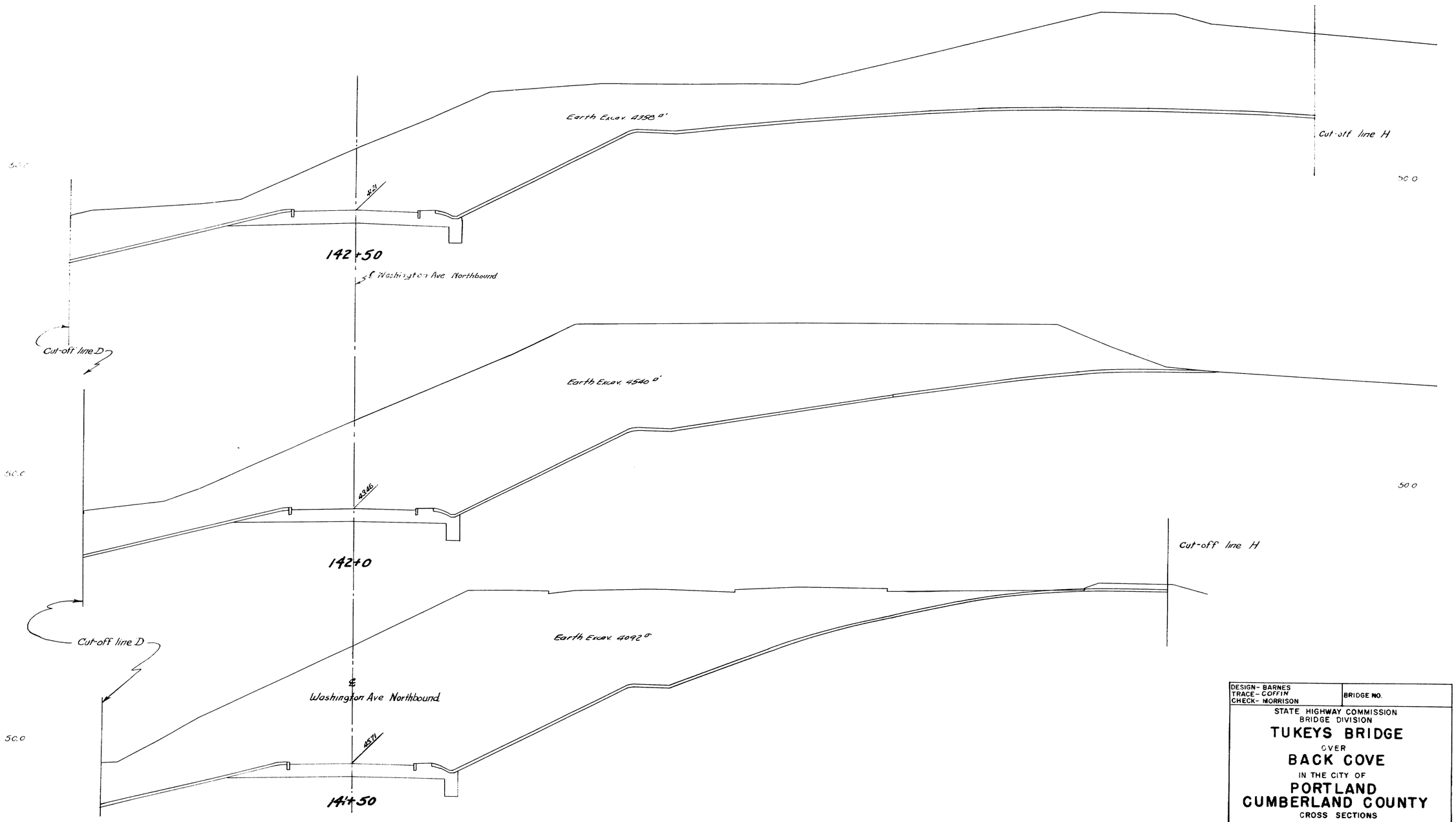
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 132 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-132

H.P.R. RTE. NO.	STATE PROJ. NO.	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
	MAINE	I-095-1(6)	133	166

I-095-2(16) 50



0 1 2 3 4 5 INCHES

DESIGN- BARNES
TRACE- COFFIN
CHECK- MORRISON

BRIDGE NO.

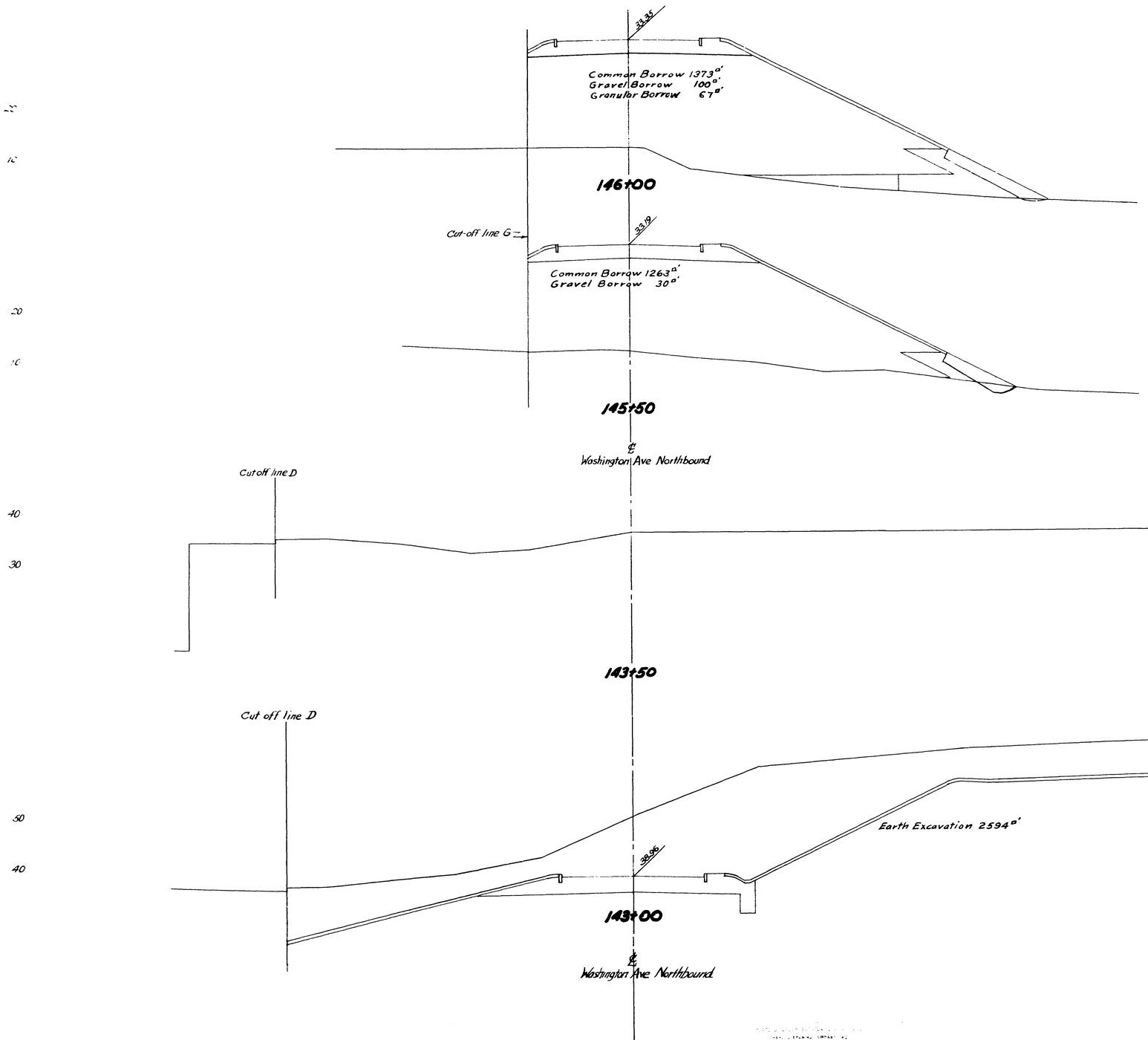
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

CROSS SECTIONS

SHEET 133 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-133



DESIGN- BARNES TRACE- COFFIN CHECK- MORRISON	BRIDGE NO.

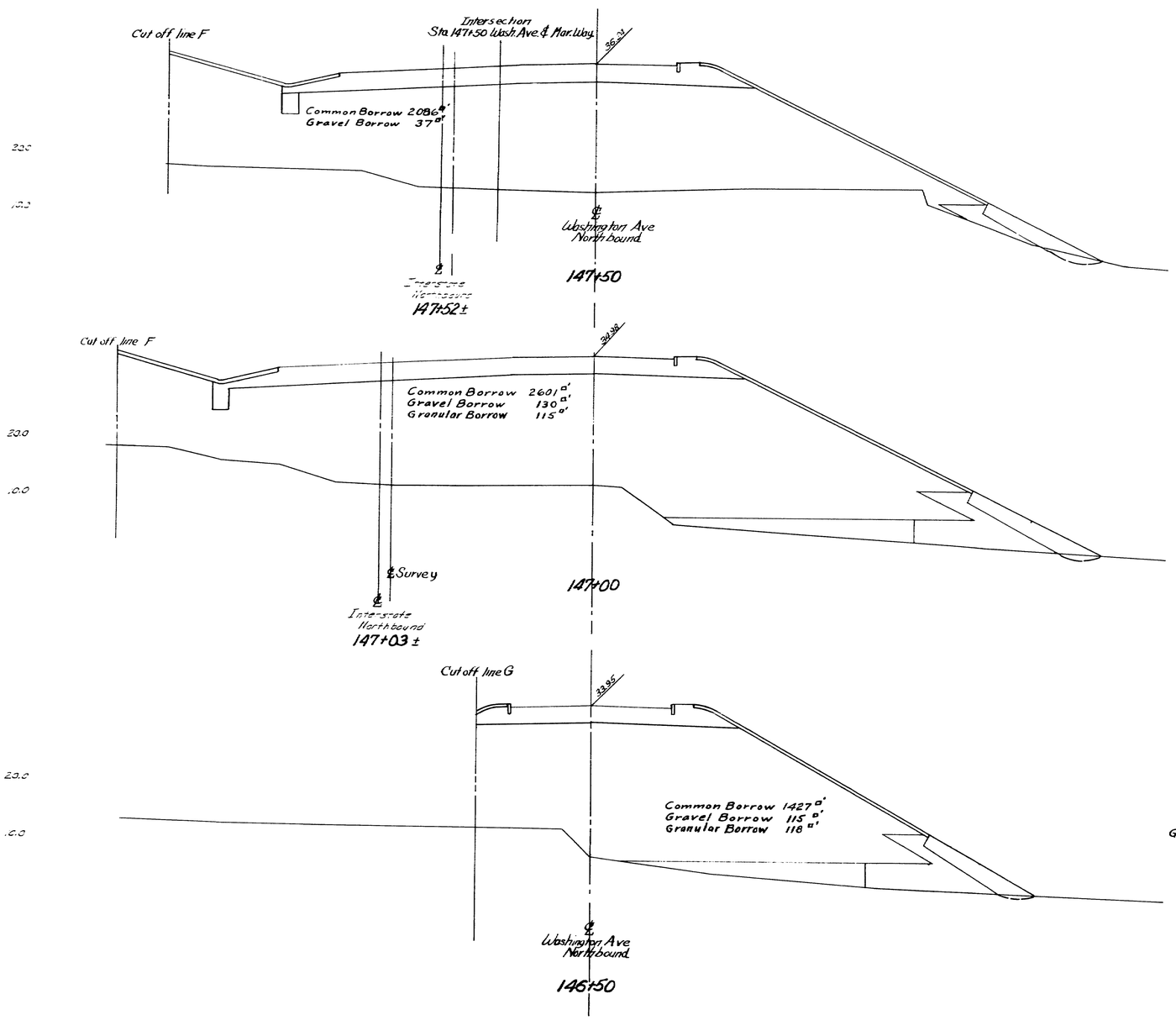
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 134 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-134

REF NO.	STATE	FED. AID NO.	SHEET NO.	TOTAL SHEETS
	MAINE	~~F-082-1(4)~~	135	166



DESIGN- BARNES
TRACE- Corrin
CHECK- MORRISON

BRIDGE NO.

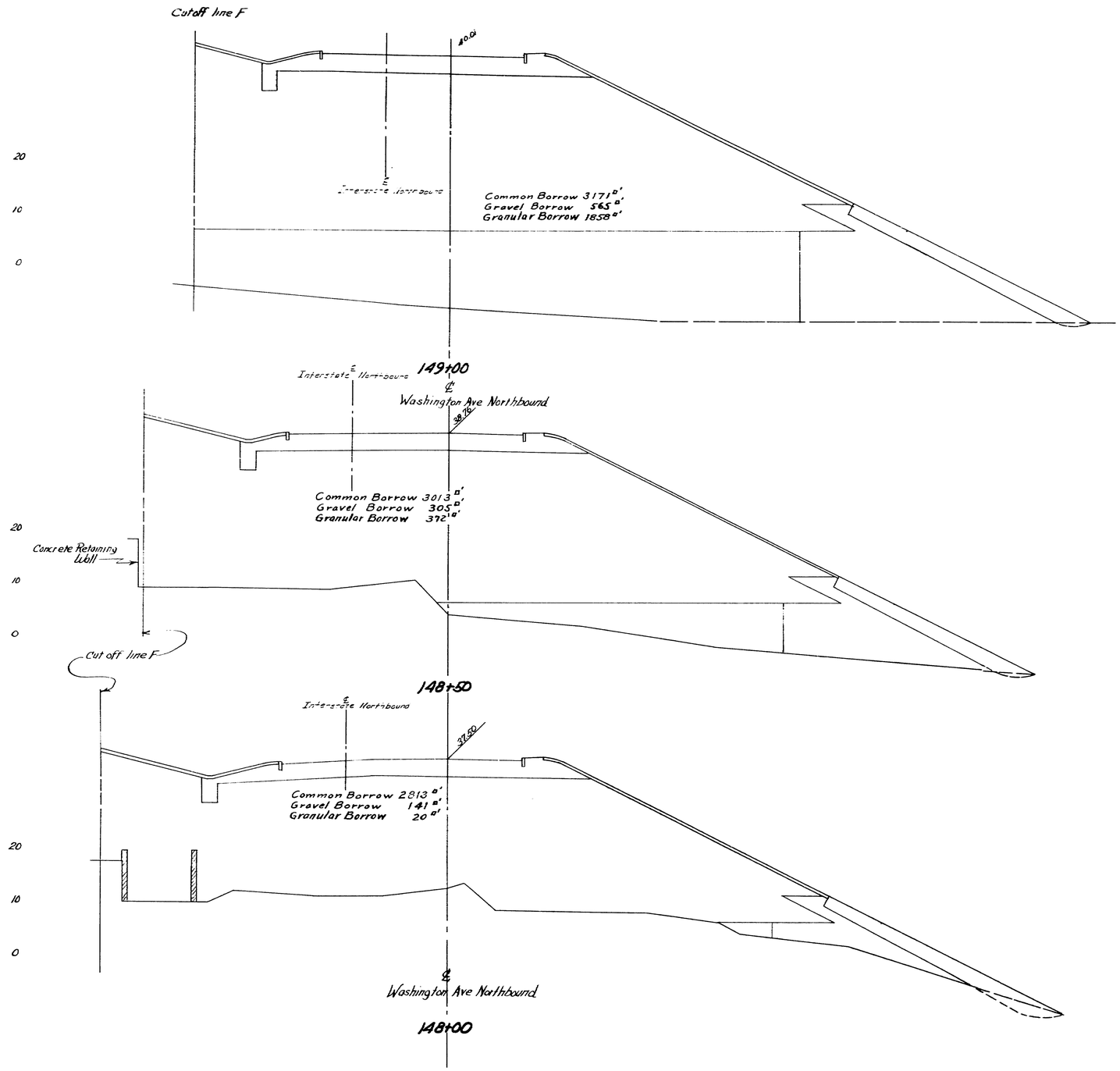
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 135 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-135

REC. 1082-114 130 166



Granular & Gravel Borrow to El. 7.0
Common Borrow above El 7.0
Rip Rap Hand laid El -4.5 to 12.0

DESIGN- BARNES TRACE- Coffin CHECK- MORRISON	BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

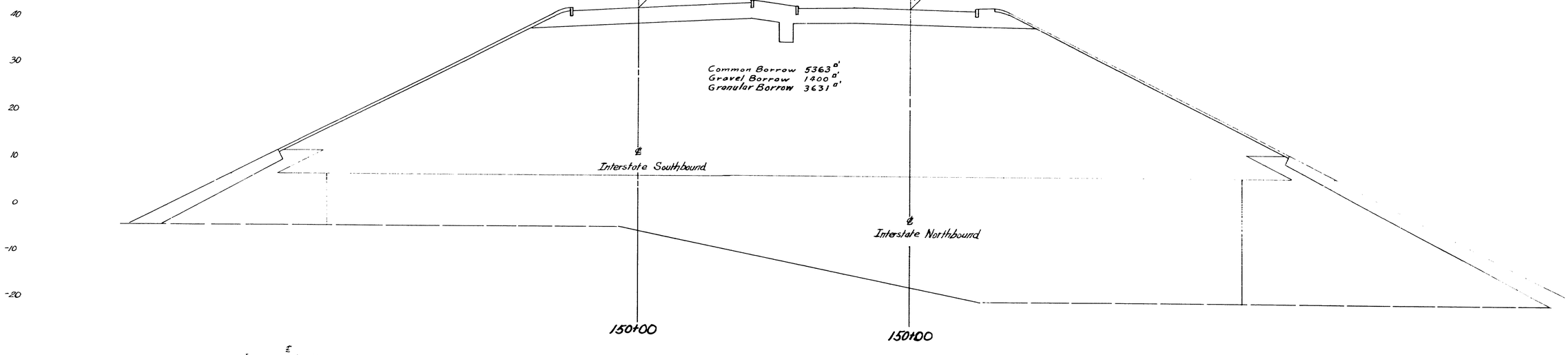
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

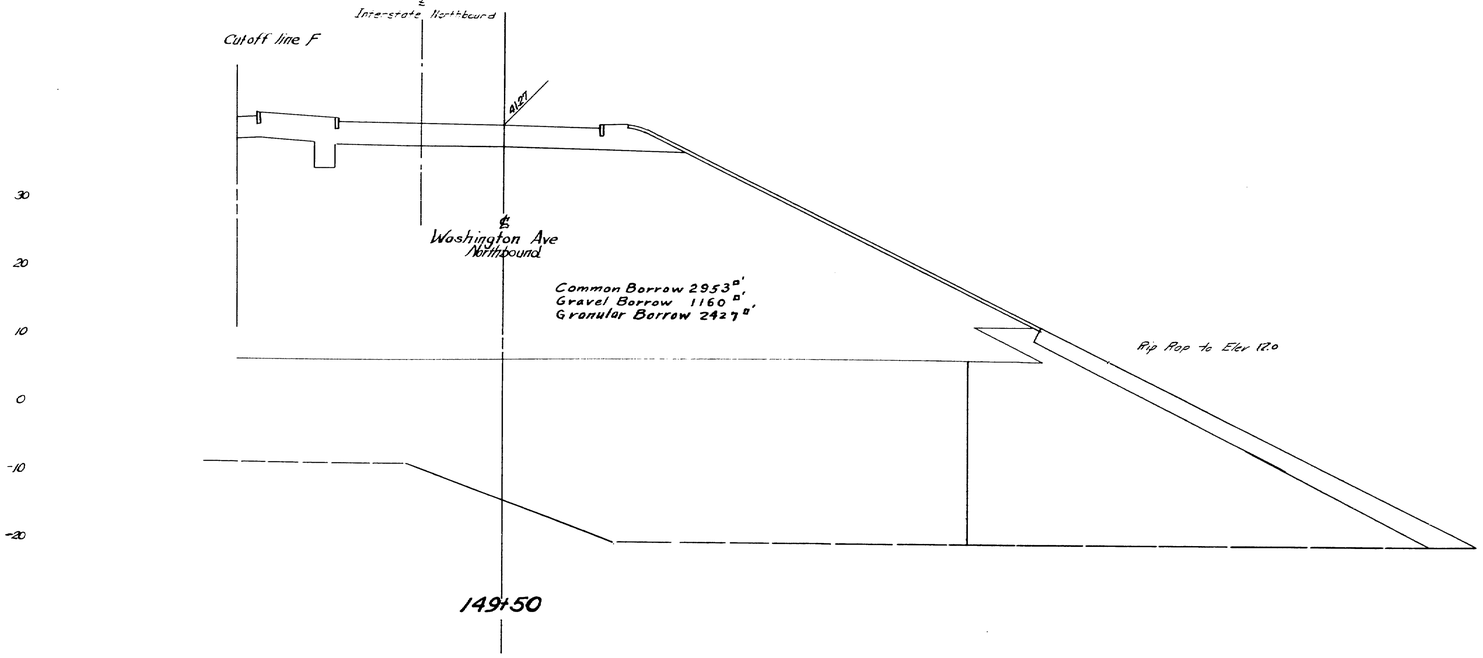
SHEET 136 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-136

0 1 2 3 4 5 INCHES

REG. NO. ... SHEETS
... F-062 (4) 137 166





Granular & Gravel Borrow below El. 7.0
Common Borrow above El. 7.0
Rip Rap Hand laid from -4.5 to 12.0

DESIGN- BARNES
TRACE- Comm
CHECK- MORRISON

BRIDGE NO.

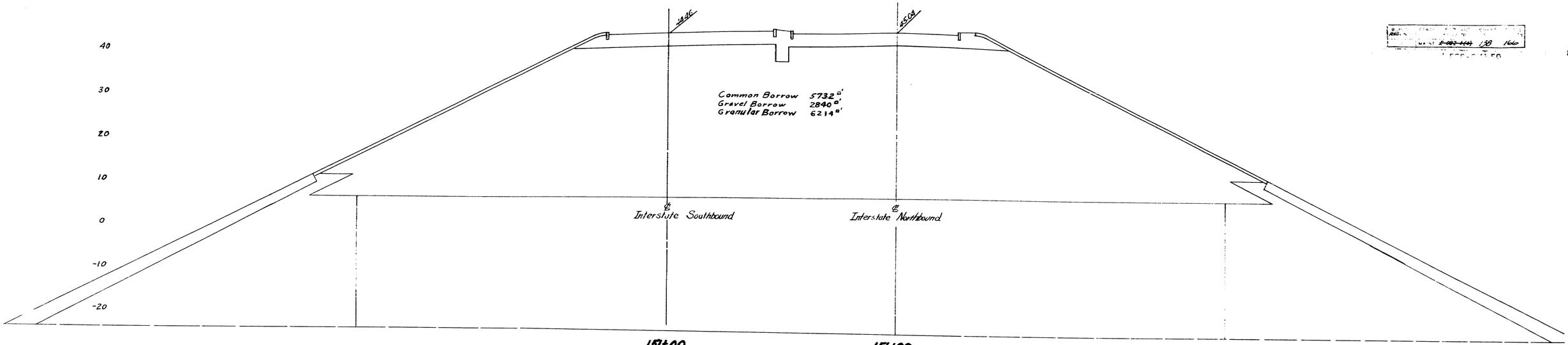
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

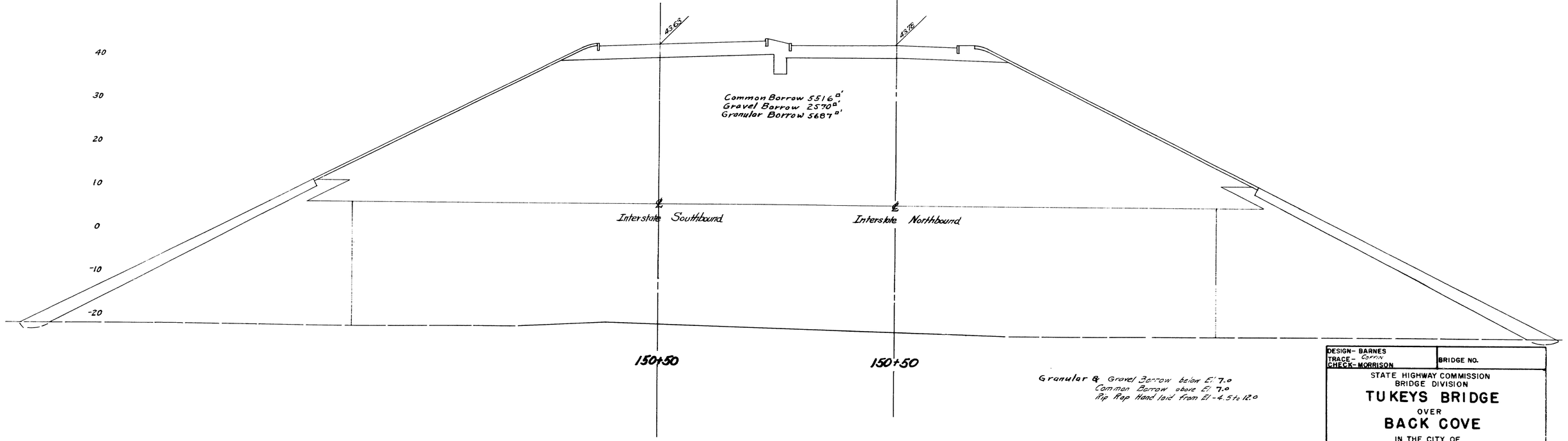
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 137 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-137

0 1 2 3 4 5 INCHES





Granular & Gravel Borrow below El 7.0
Common Borrow above El 7.0
Rip Rap Hand laid from El -4.5 to 12.0

DESIGN- BARNES
TRACE- GWIN
CHECK- MORRISON

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

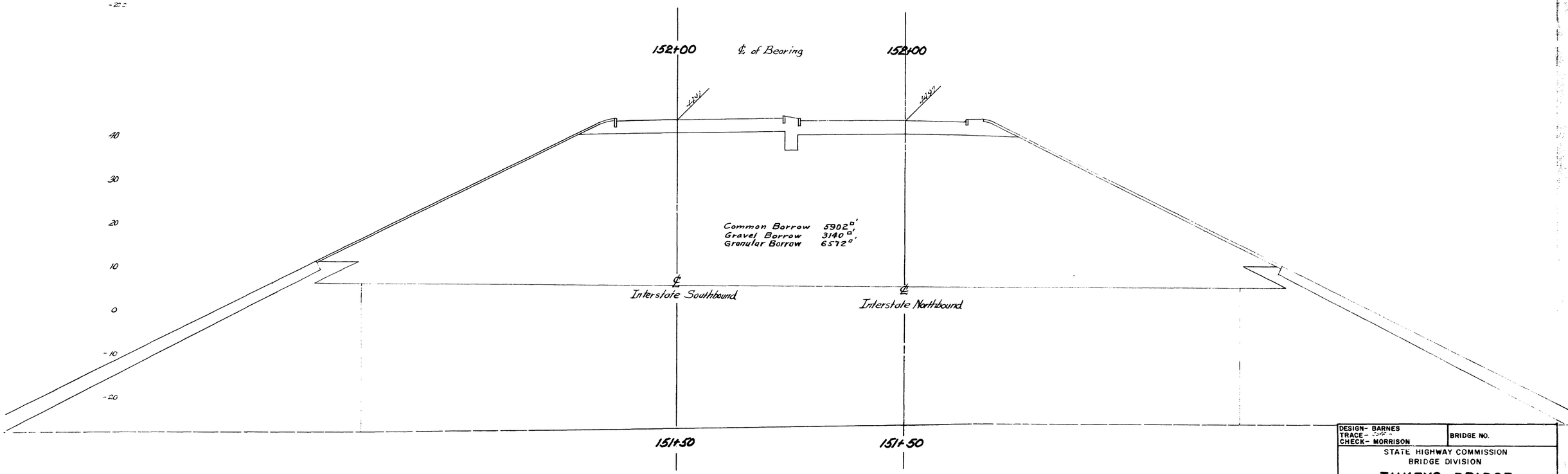
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 138 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-138

0 1 2 3 4 5 INCHES

REC. ~~1-80-149~~ 139 166



Granular ℄ Gravel Borrow below El. 7.0
Common Borrow above El. 7.0
Rip Rap Hand Laid from El. -4.5 to +12.0

DESIGN- BARNES
TRACE- [illegible]
CHECK- MORRISON

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

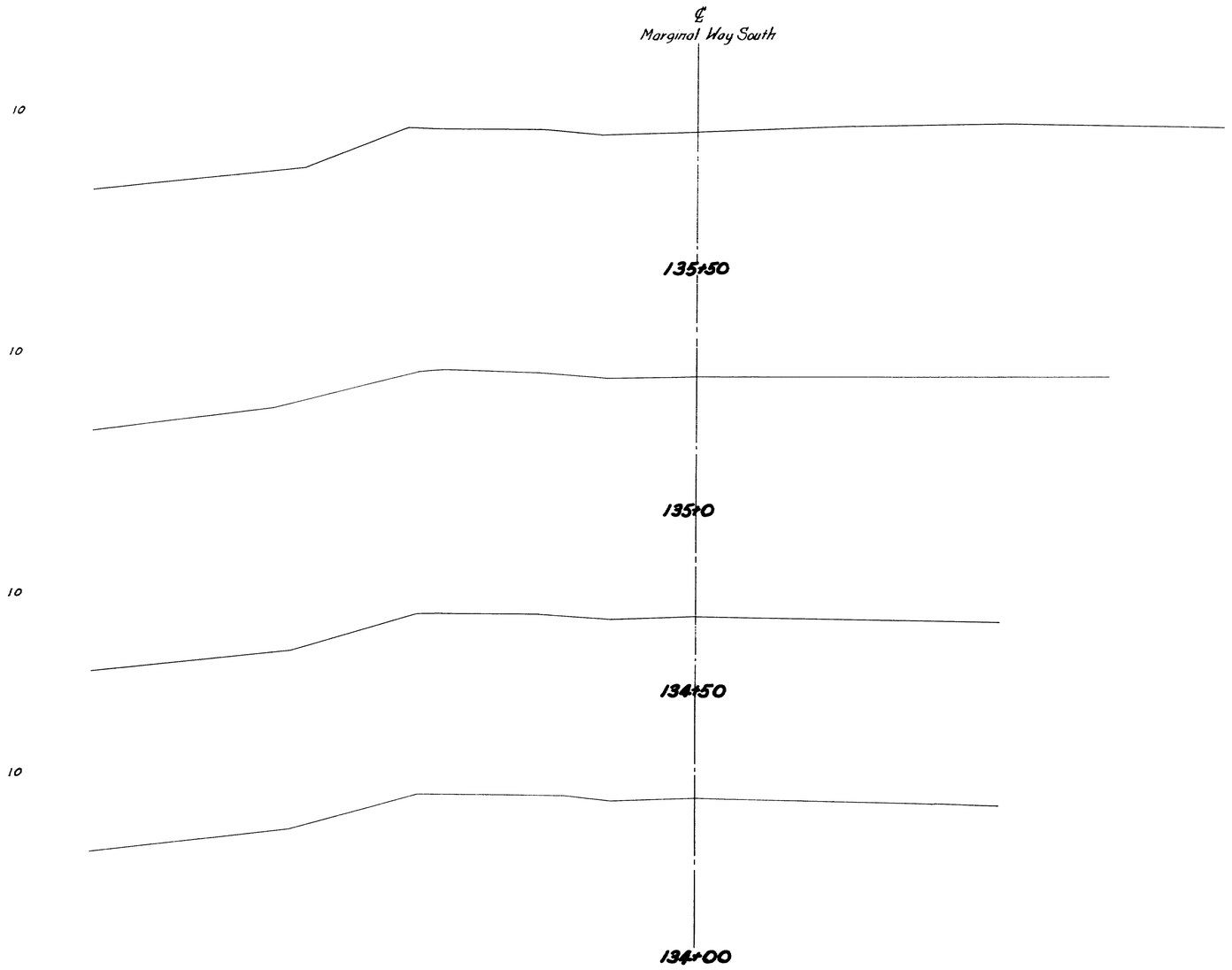
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 139 OF 166 AUGUSTA, MAINE. OCT. 1957.

76 - 139

0 1 2 3 4 5 INCHES

REF. [illegible] 140 166



DESIGN- BARNES TRACE- Barnes CHECK- MORRISON	BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

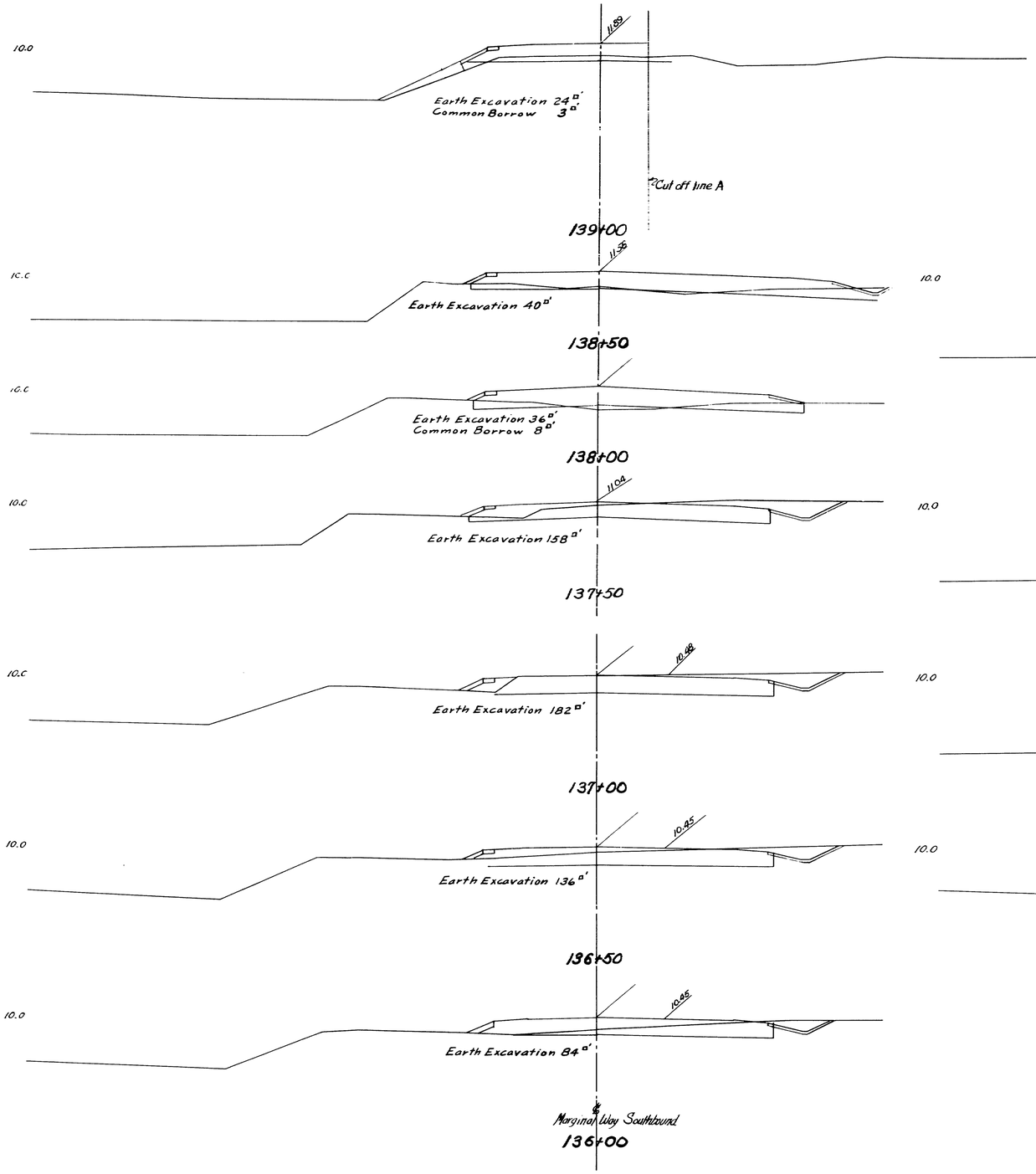
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

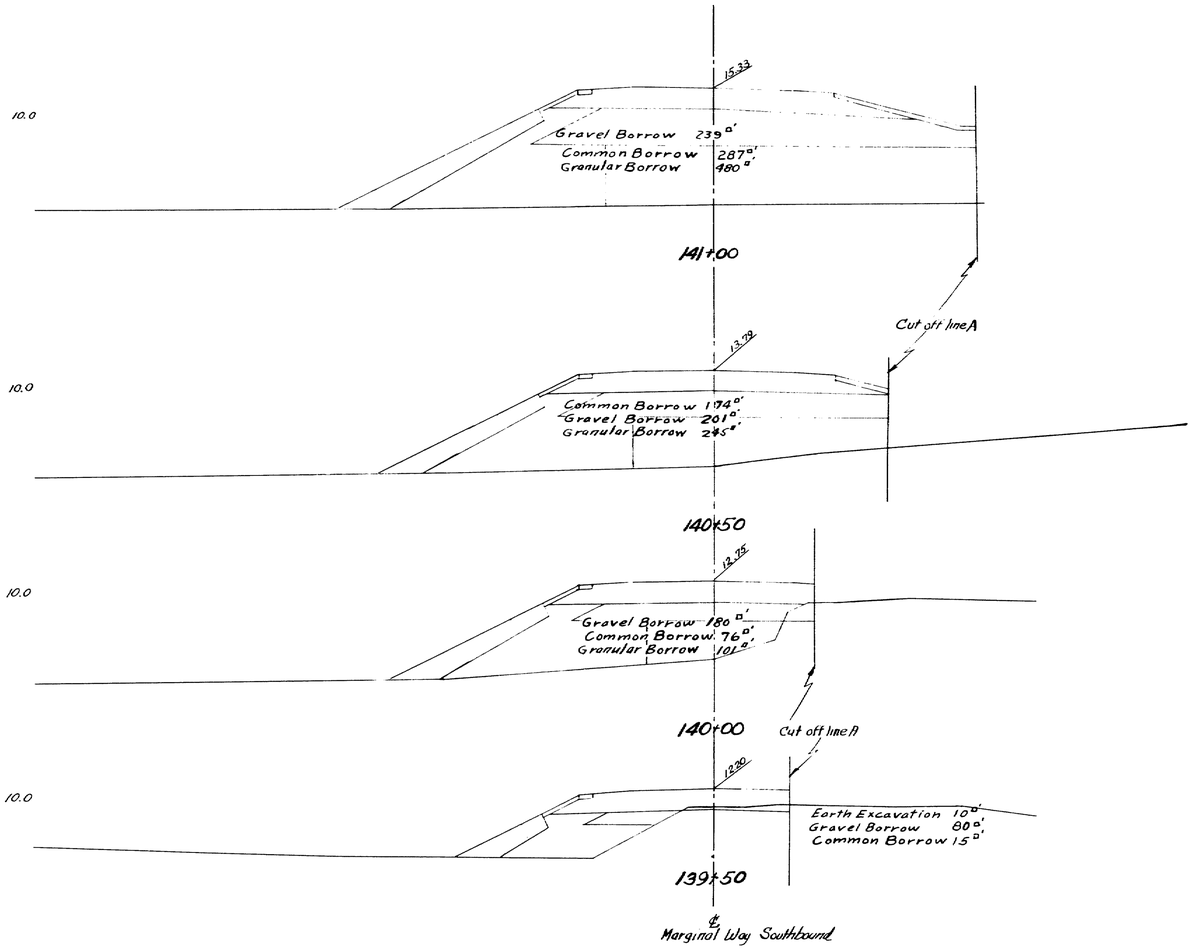
SHEET 140 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-140

0 1 2 3 4 5 INCHES

REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	MAINE	~~BRC-169~~	141	166





Granular & Gravel Borrow below El 7.0
Common Borrow above El 7.0
Rip Rap Hand laid from El 4.5 to 12.0' or as shown.

0 1 2 3 4 5 INCHES

DESIGN- BARNES
TRACE- Coffin
CHECK- MORRISON

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

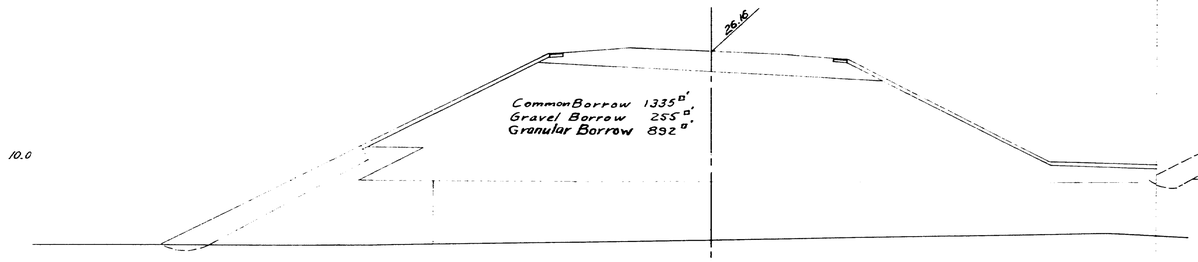
CROSS SECTIONS

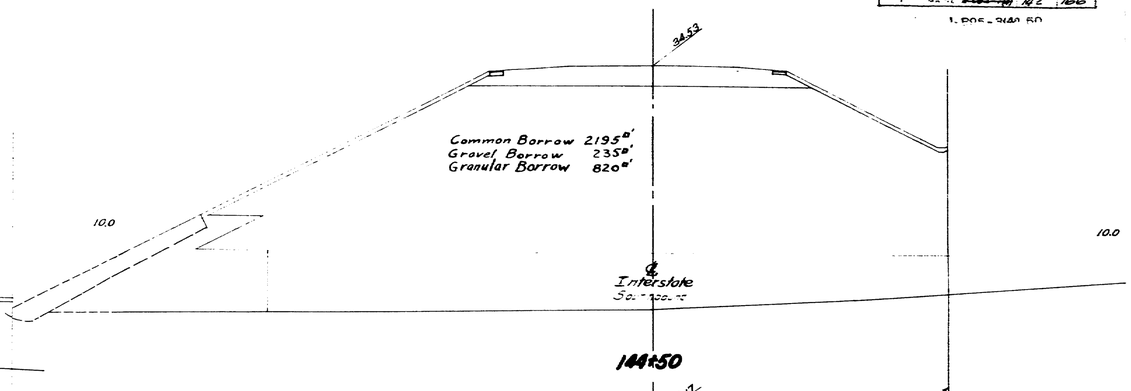
SHEET 141 OF 166 AUGUSTA, MAINE, OCT. 1957.

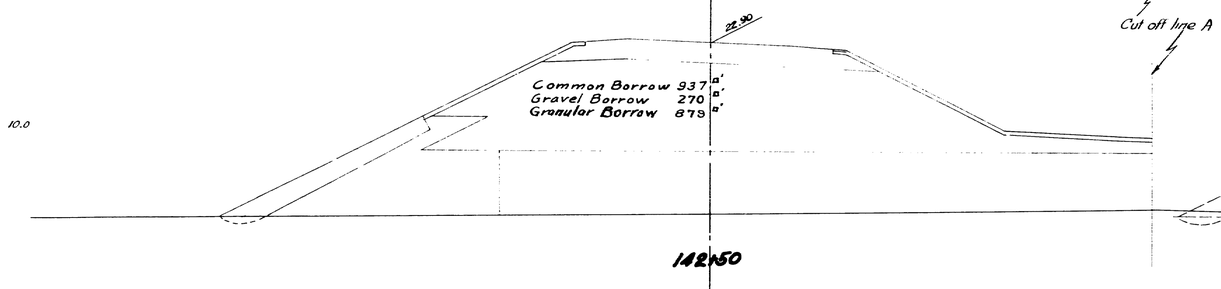
76-141

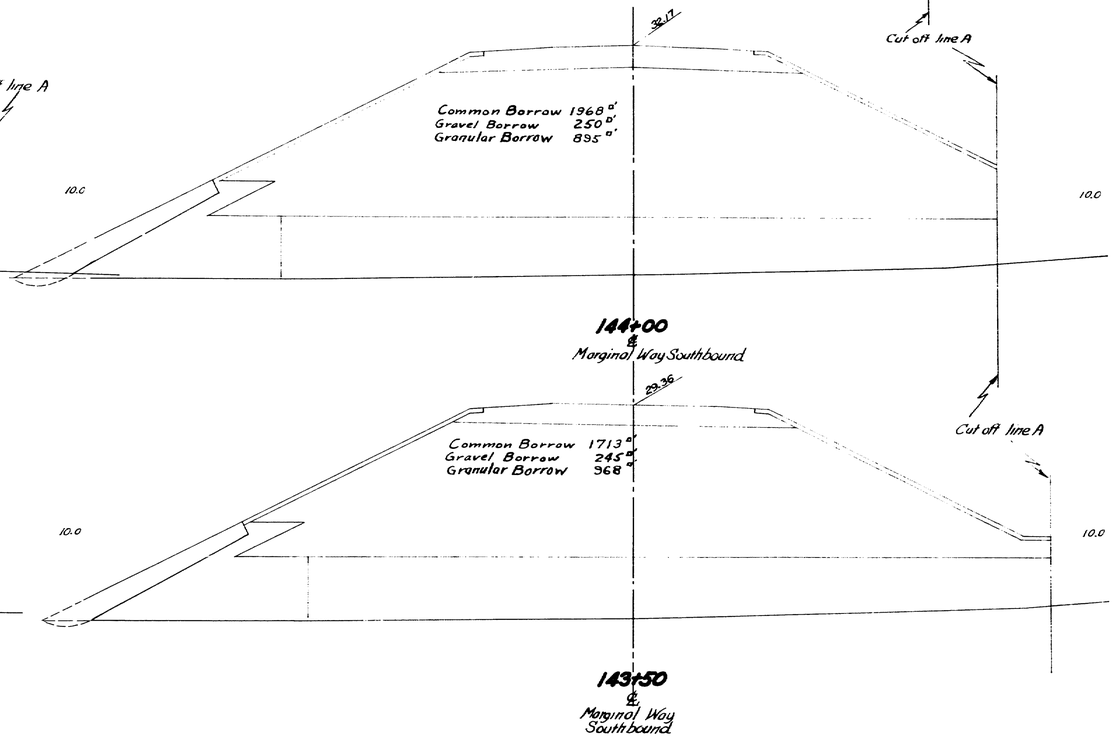
REG. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	~~BRDG (6) 142~~	142	166

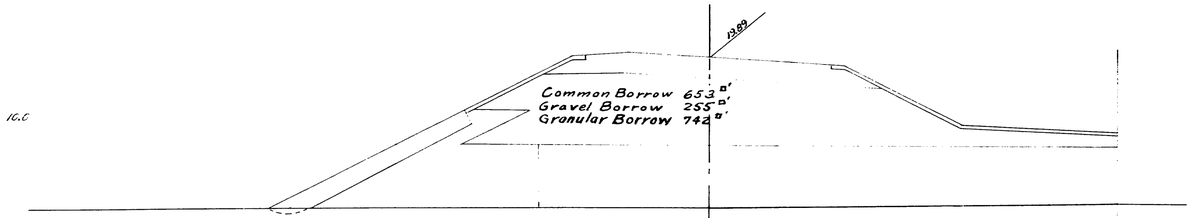
1-805-3(40) 50

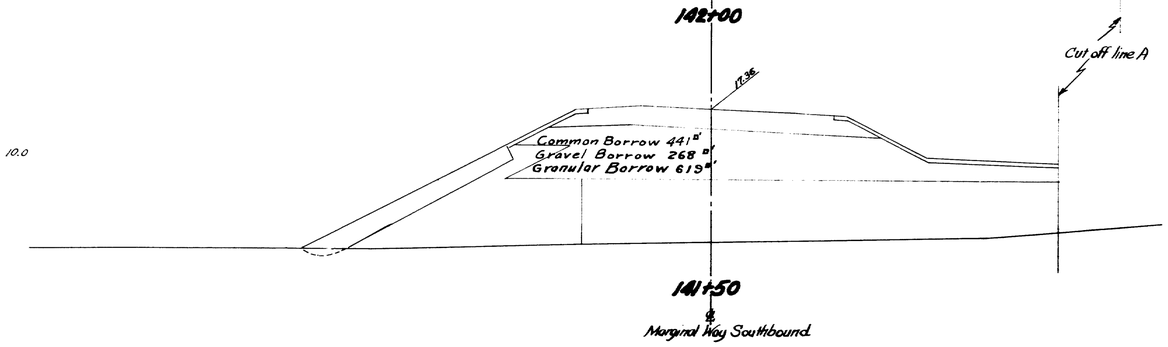












Granular & Gravel Borrow below El 7.0
Common Borrow above El 7.0
Rip Rap Hand laid El -4.5 to 12.0

DESIGN- BARNES TRACE- JMF CHECK- MORRISON	BRIDGE NO.

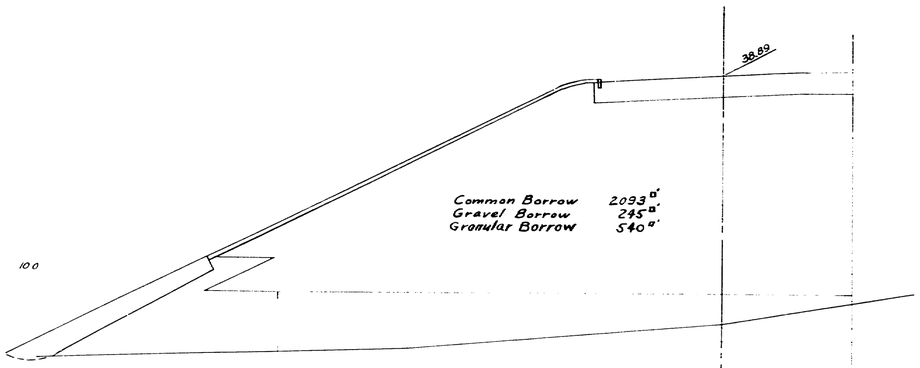
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

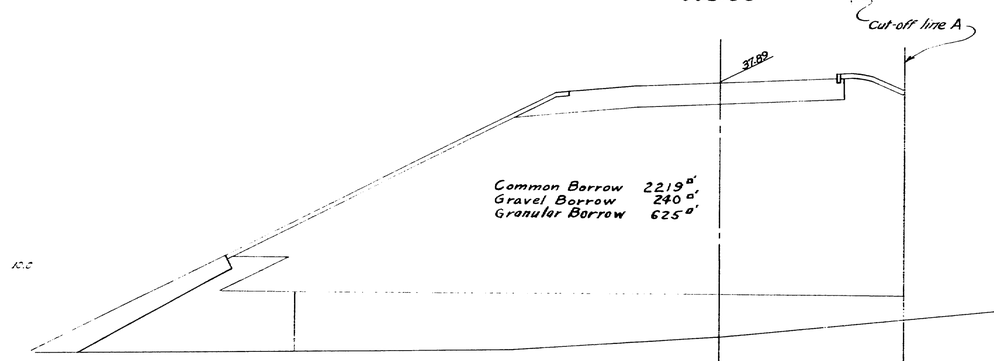
SHEET 142 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-142

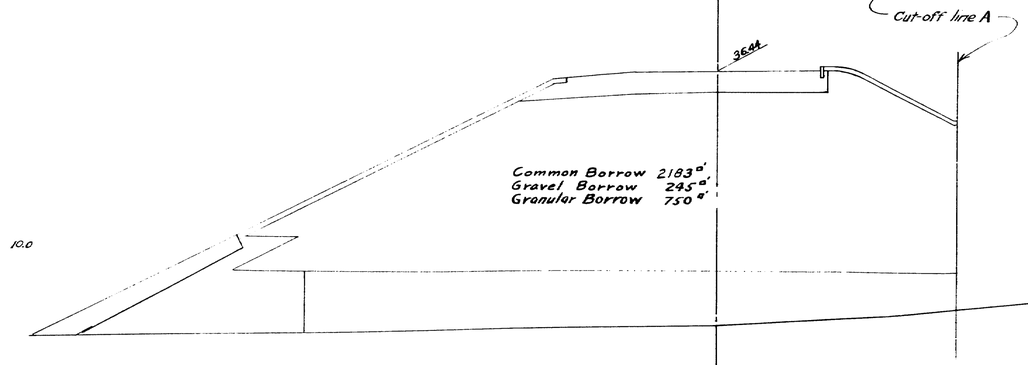
0 1 2 3 4 5 INCHES



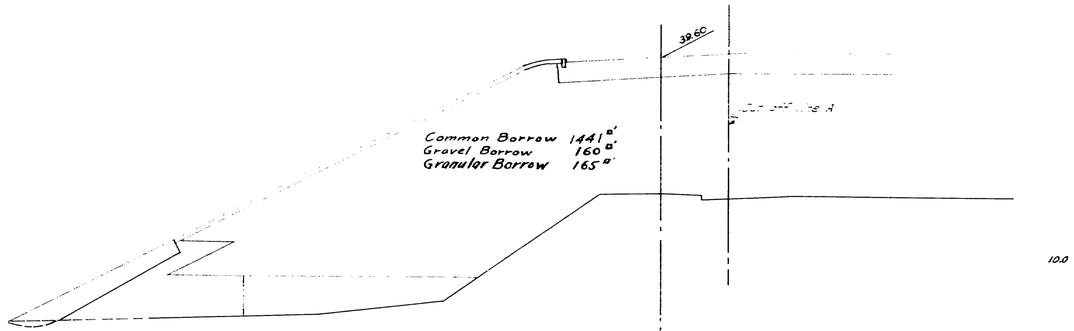
146+00



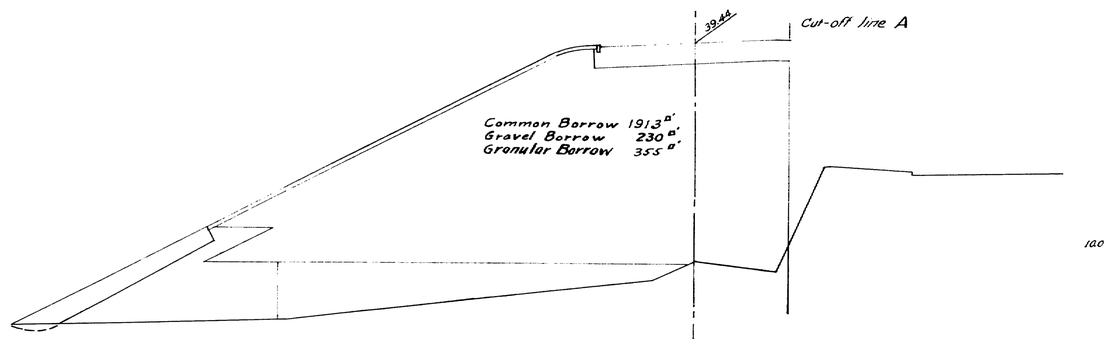
145+50



145+00
℄
Interstate
Southbound



147+00



146+50
℄
Interstate
Southbound

Granular & Gravel Borrow below El 7.0
Common Borrow above El. 7.0
Rip Rap Hand laid from El -4.5 to 12.0

DESIGN- BARNES TRACE- Morrison CHECK- MORRISON	BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

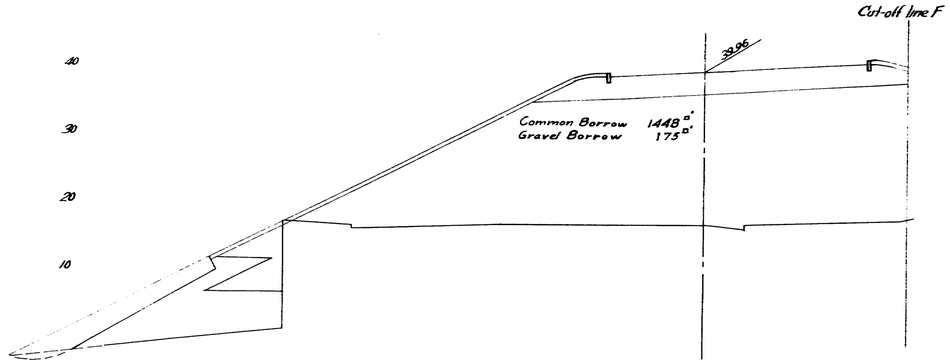
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

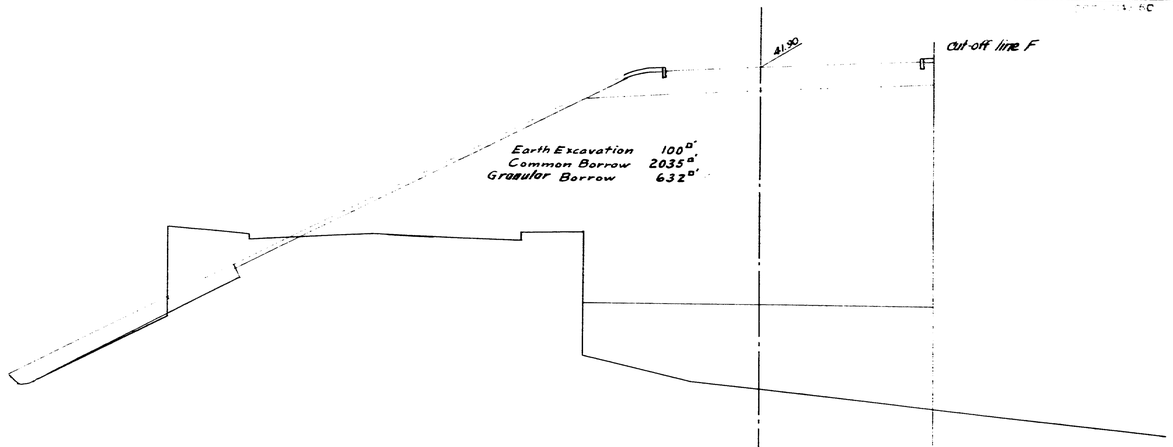
SHEET 143 OF 166 AUGUSTA, MAINE, OCT. 1957.

76-143

0 1 2 3 4 5 INCHES

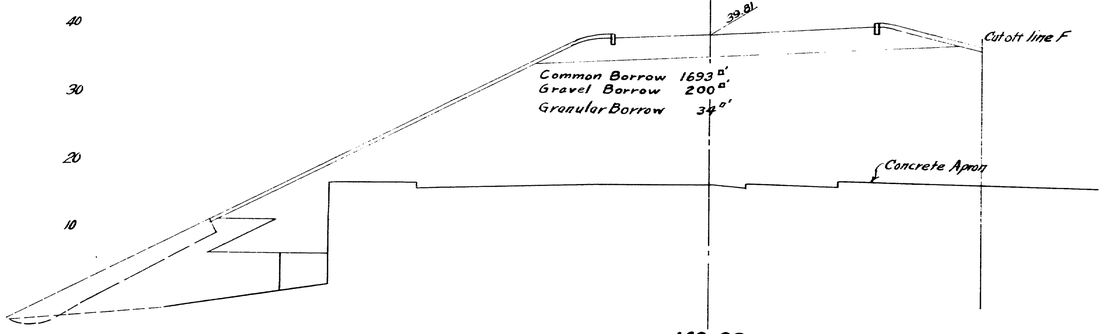
SHEET NO.	TOTAL SHEETS
1 - MASTER	~~166~~ 144 166



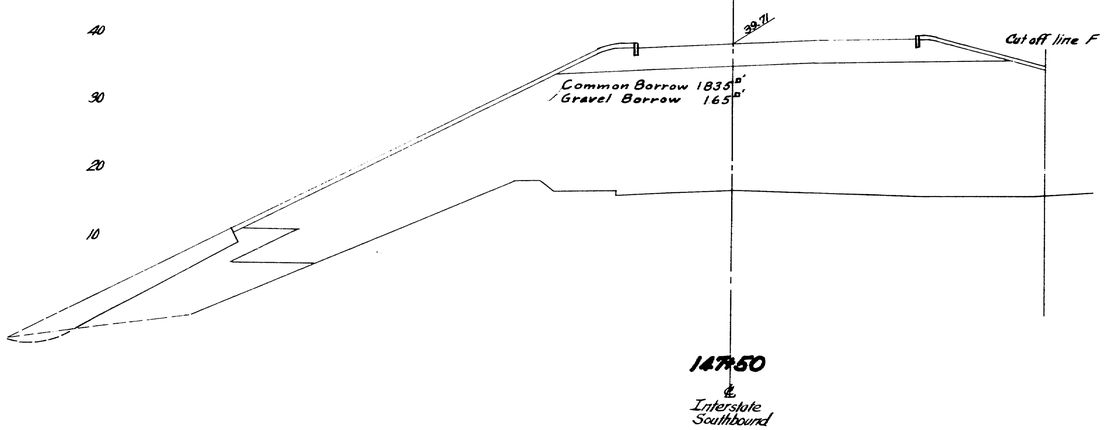


148+50

℄ Interstate Southbound



148+00

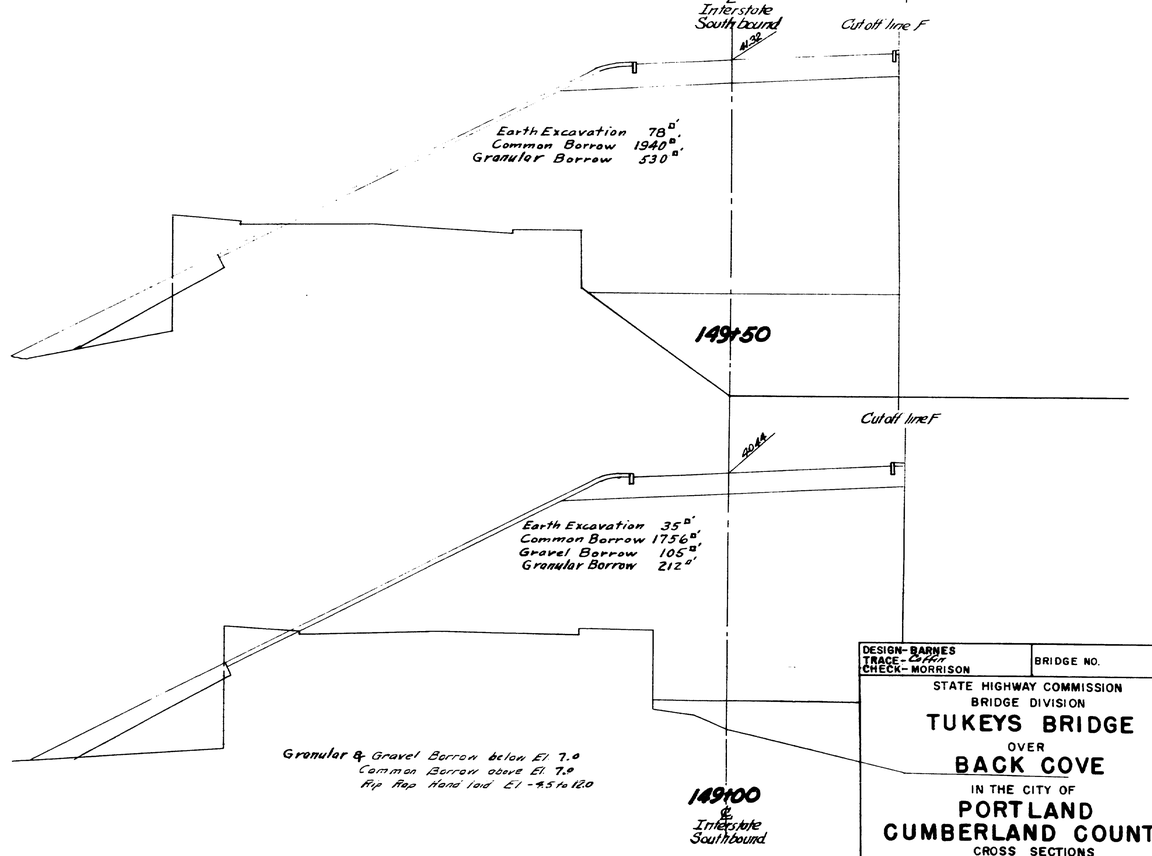


147+50

℄ Interstate Southbound

149+75

℄ Interstate Southbound



149+00

℄ Interstate Southbound

DESIGN- BARNES TRACE- Green CHECK- MORRISON	BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

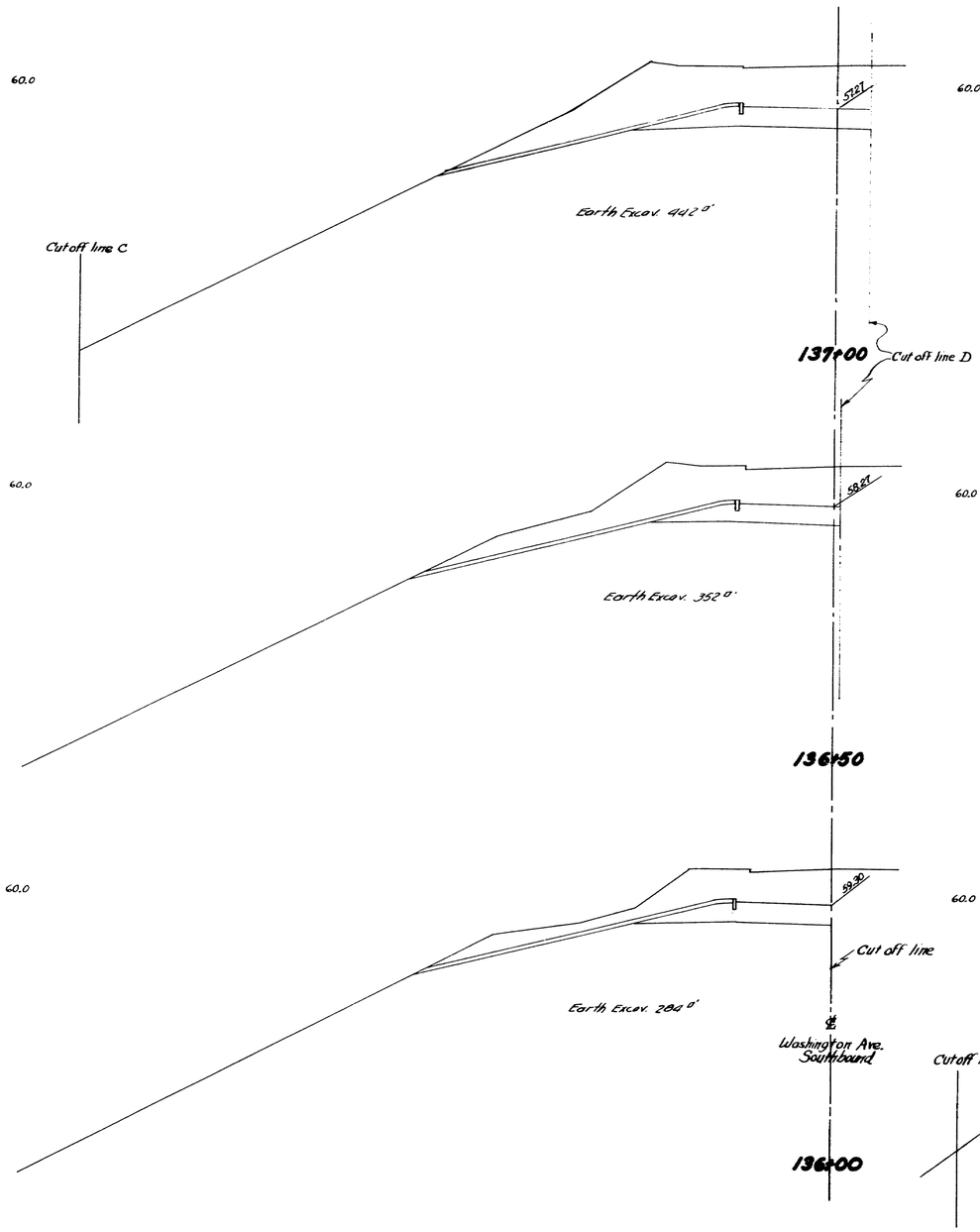
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

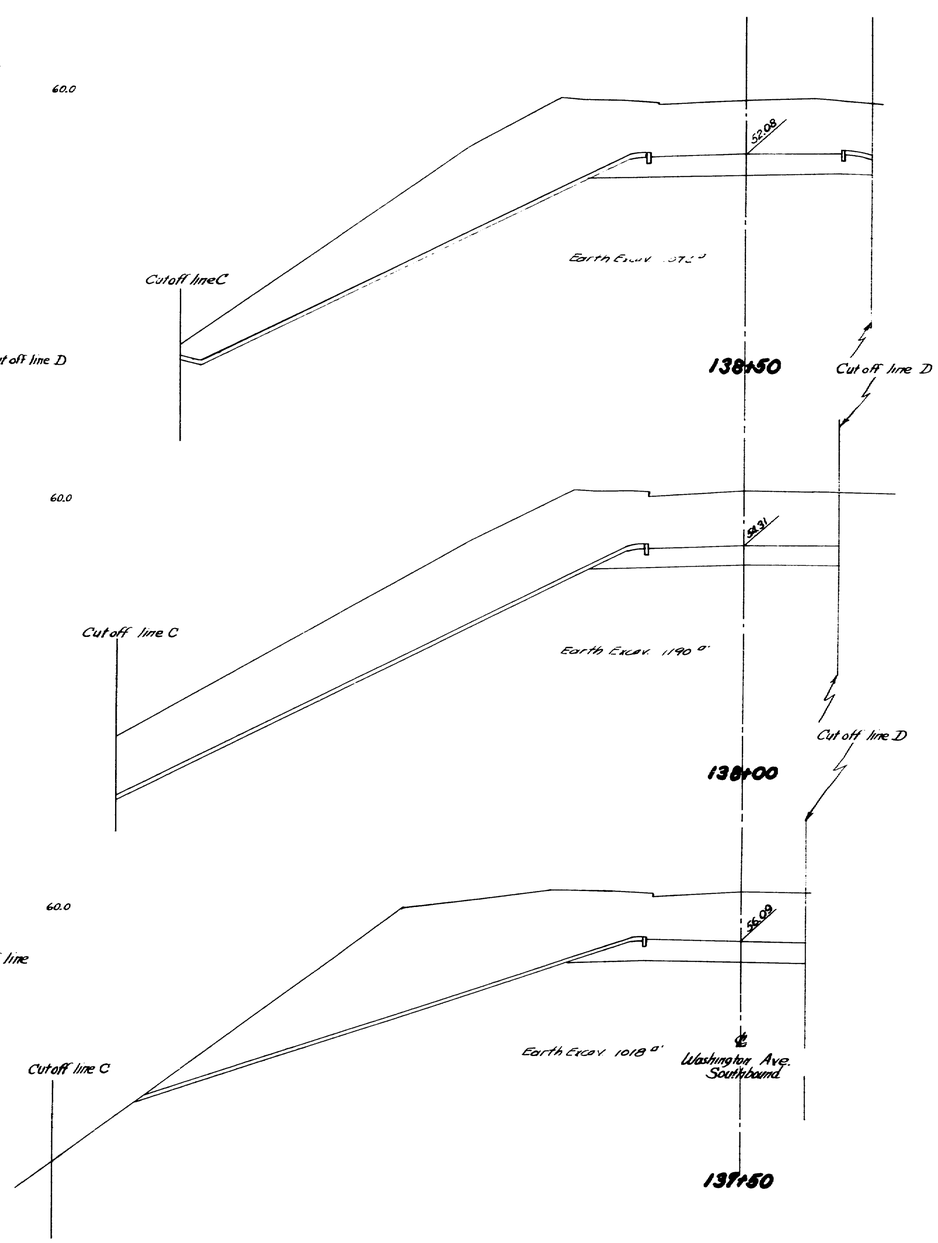
SHEET 144 OF 166 AUGUSTA, MAINE. OCT. 1957.

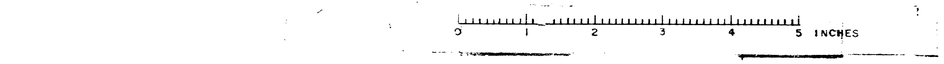
76-144

0 1 2 3 4 5 INCHES

B.P.R.	STATE	FED. AID	SHEET	TOTAL SHEETS
B.D.				
	MAINE	~~F-001-1(4)~~	145	166







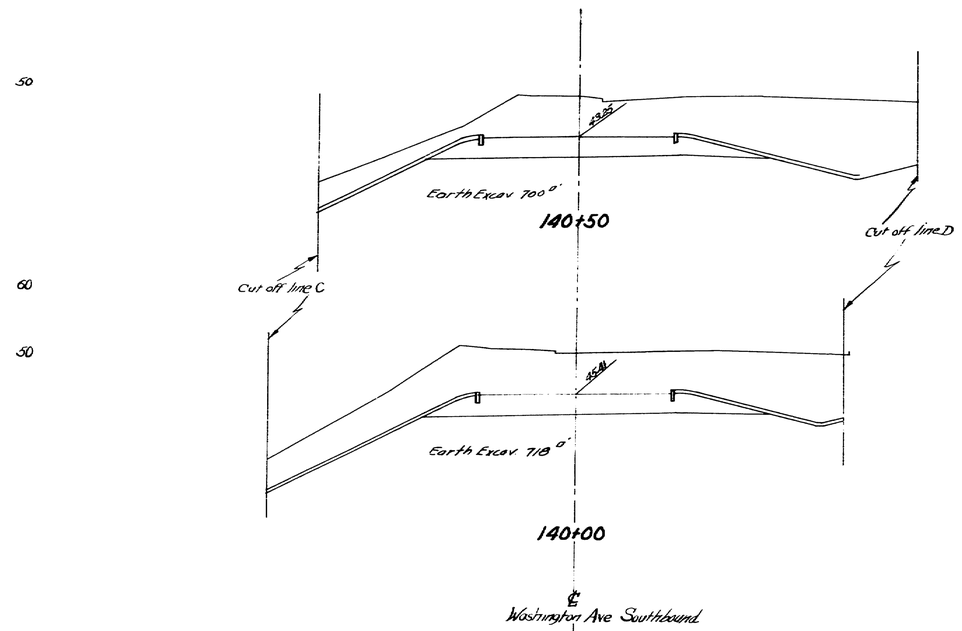
DESIGN- BARNES TRACE- Coffin CHECK- MORRISON	BRIDGE NO.

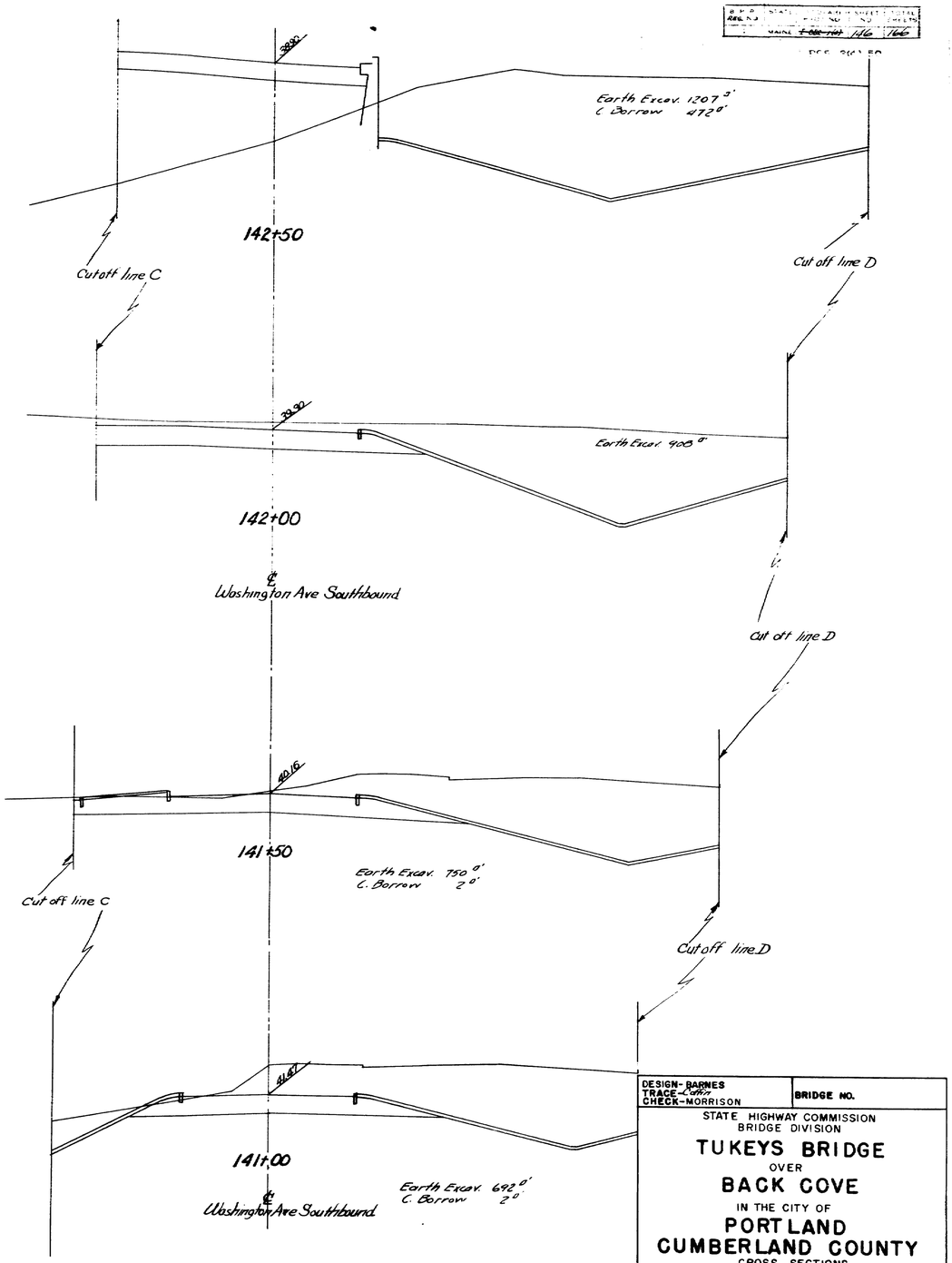
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

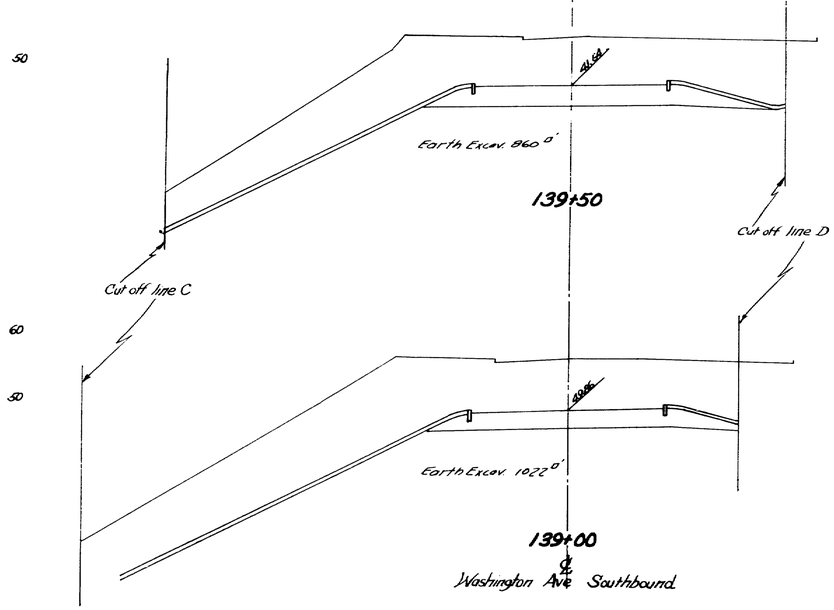
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

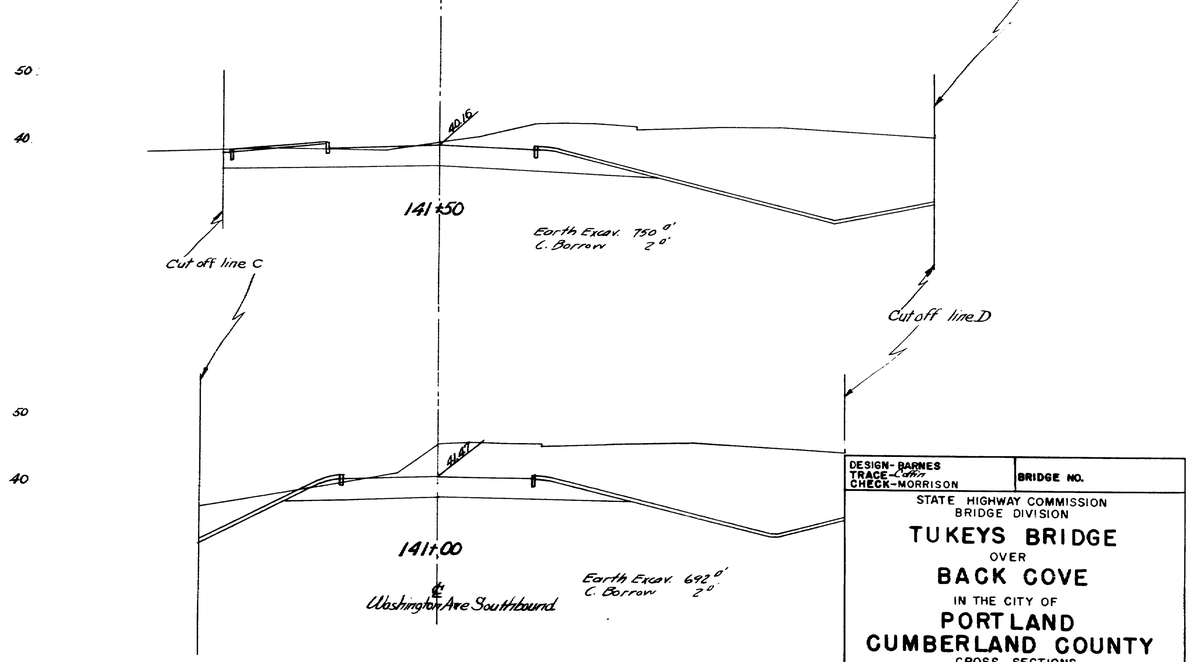
SHEET 145 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-145









BRD.	STATE	SHEET NO.	TOTAL SHEETS
ABR.			
	MAINE	146	166

DESIGN- BARNES
TRACE- [illegible]
CHECK- MORRISON

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 146 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-146

0 1 2 3 4 5 INCHES

STATE OF MAINE
REG NO | STATE PROJECT NO | SHEET NO | TOTAL SHEETS
PROJECT(S) 127 166

℄ Washington Ave Southbound

Cut off line A

Cut off line F

39.14

Common Borrow 1418 □'
Granular Borrow 82 □'

40 30 20 10

145+50

Cut off line A

Cut off line F

39.09

Common Borrow 1746 □'
Granular Borrow 129 □'

40 30 20 10

145+00

Cut off line A

Cut off line F

39.04

Common Borrow 1836 □'
Granular Borrow 200 □'

40 30 20 10

144+50

℄ Washington Ave Southbound

℄ Washington Ave Southbound

Cut off line A

Cut off line F

40.56

Common Borrow 788 □'

40 30 20 10

147+00

Cut off line A

Cut off line F

39.99

Common Borrow 840 □'

40 30 20 10

146+50

Cut off line A

Cut off line F

39.44

Common Borrow 1128 □'
Granular Borrow 20 □'

40 30 20 10

146+00

Granular & Gravel Borrow below El 7.0
Common Borrow above El 7.0

℄ Washington Ave Southbound

0 1 2 3 4 5 INCHES

DESIGN- BARNES
TRACE- Coffin
CHECK- MORRISON

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

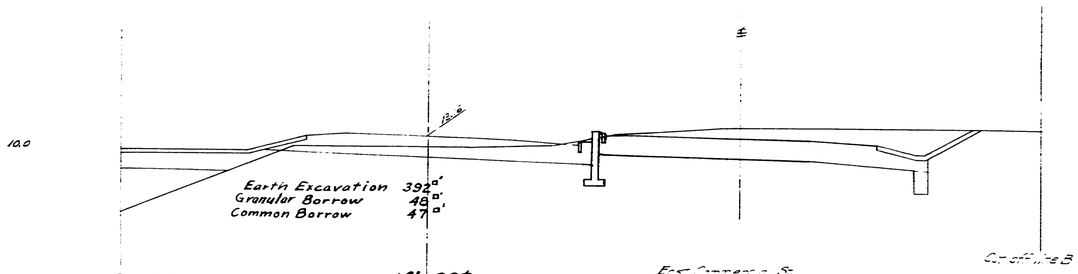
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

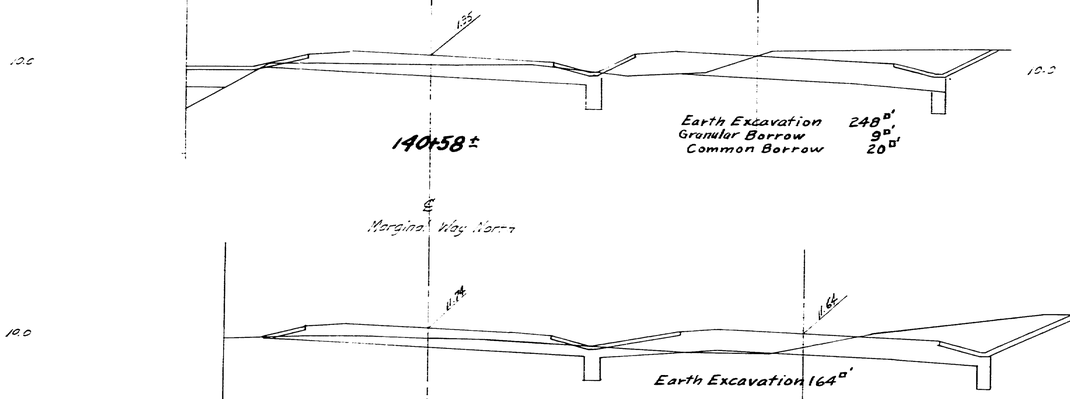
CROSS SECTIONS

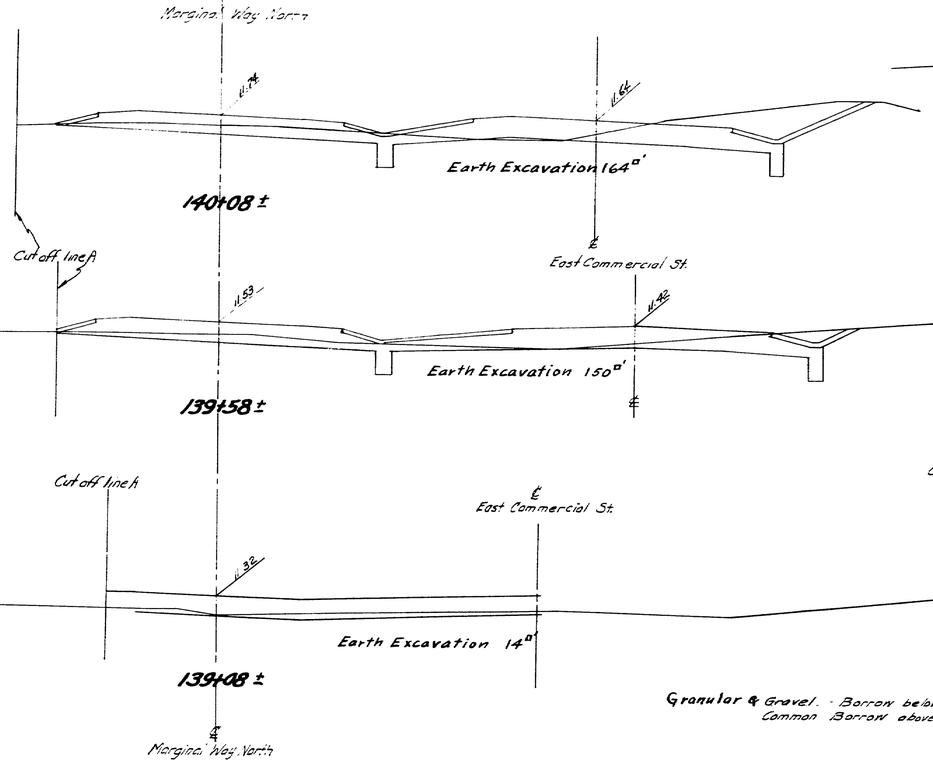
SHEET 147 OF 166 AUGUSTA, MAINE. OCT. 1957.

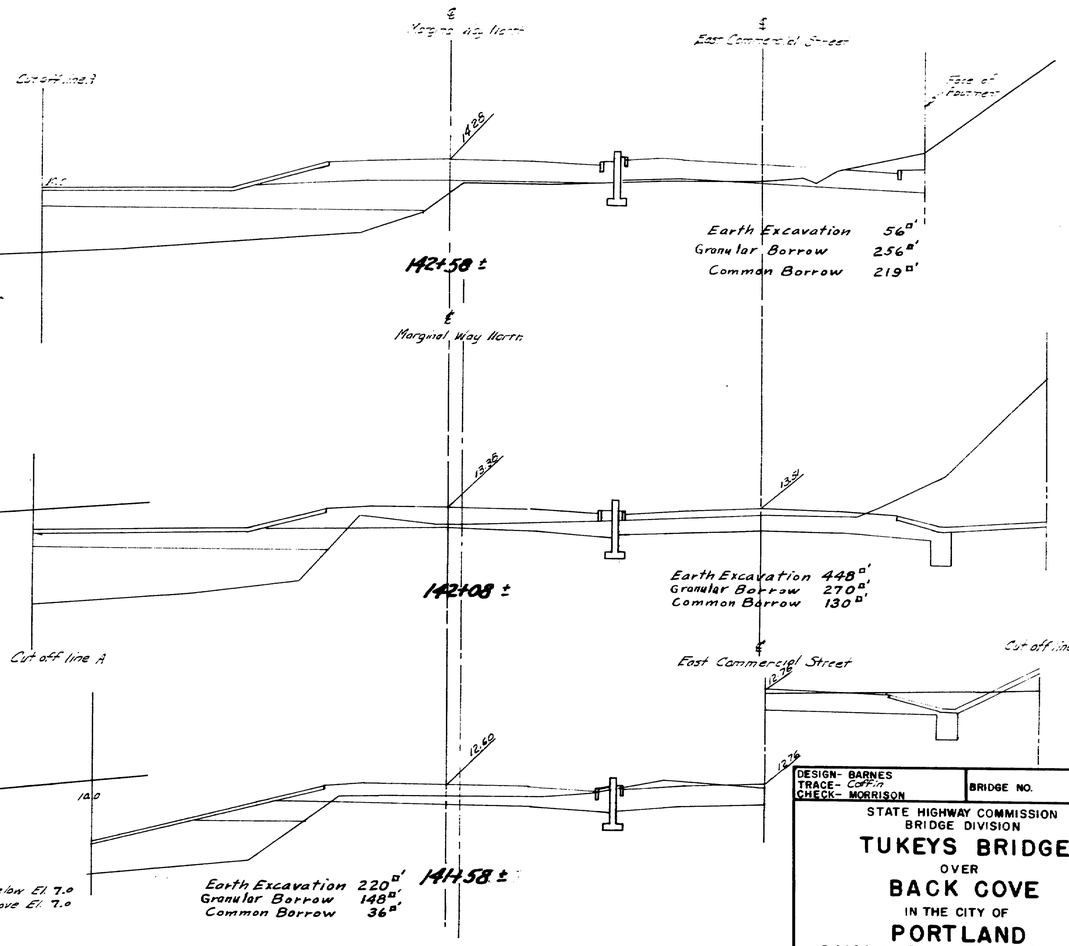
76-147

B.P.R.	STATE	FED. AID	SHEET	TOTAL
266		PROJ. NO.	NO.	SHEETS
	MAINE	~~I-95-1(4)~~	148	166









0 1 2 3 4 5 INCHES

DESIGN- BARNES
TRACE- Coffin
CHECK- MORRISON

BRIDGE NO.

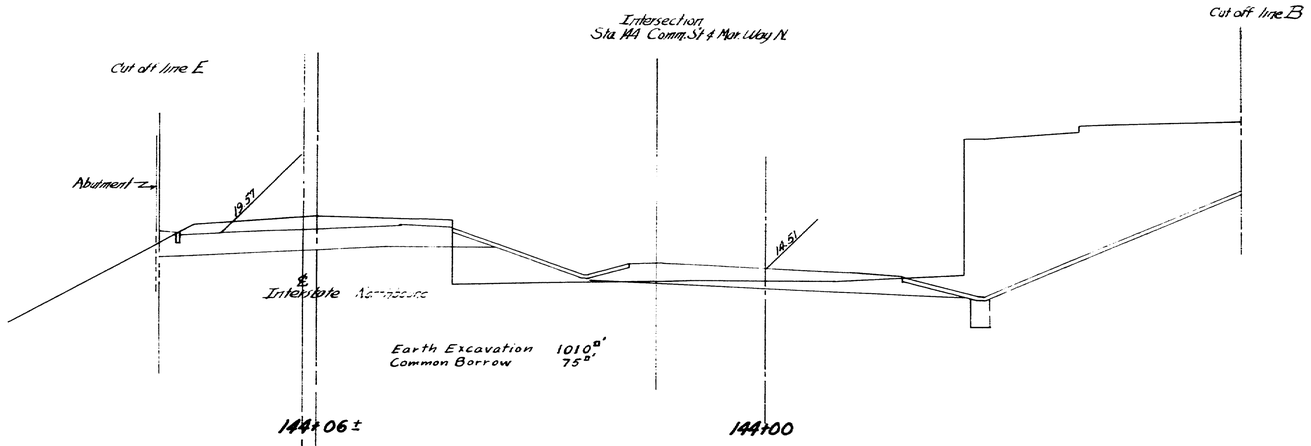
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

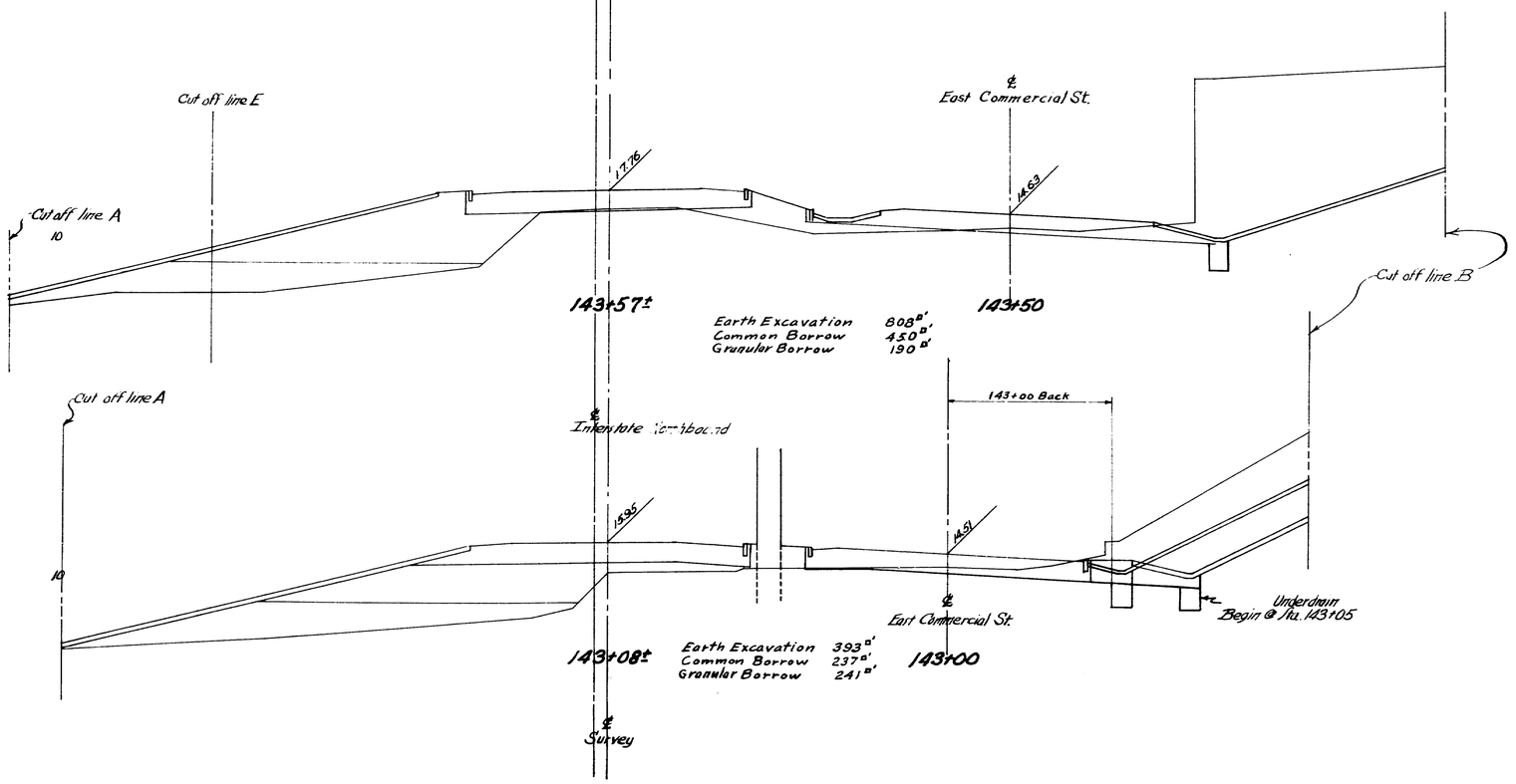
SHEET 148 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-148

REF. NO.	STATE	AID	SHEET	TOTAL SHEETS
1	MAINE	F-000-1(6)	149	166



10



0 1 2 3 4 5 INCHES

DESIGN- BARNES TRACE- Collins CHECK- MORRISON	BRIDGE NO.

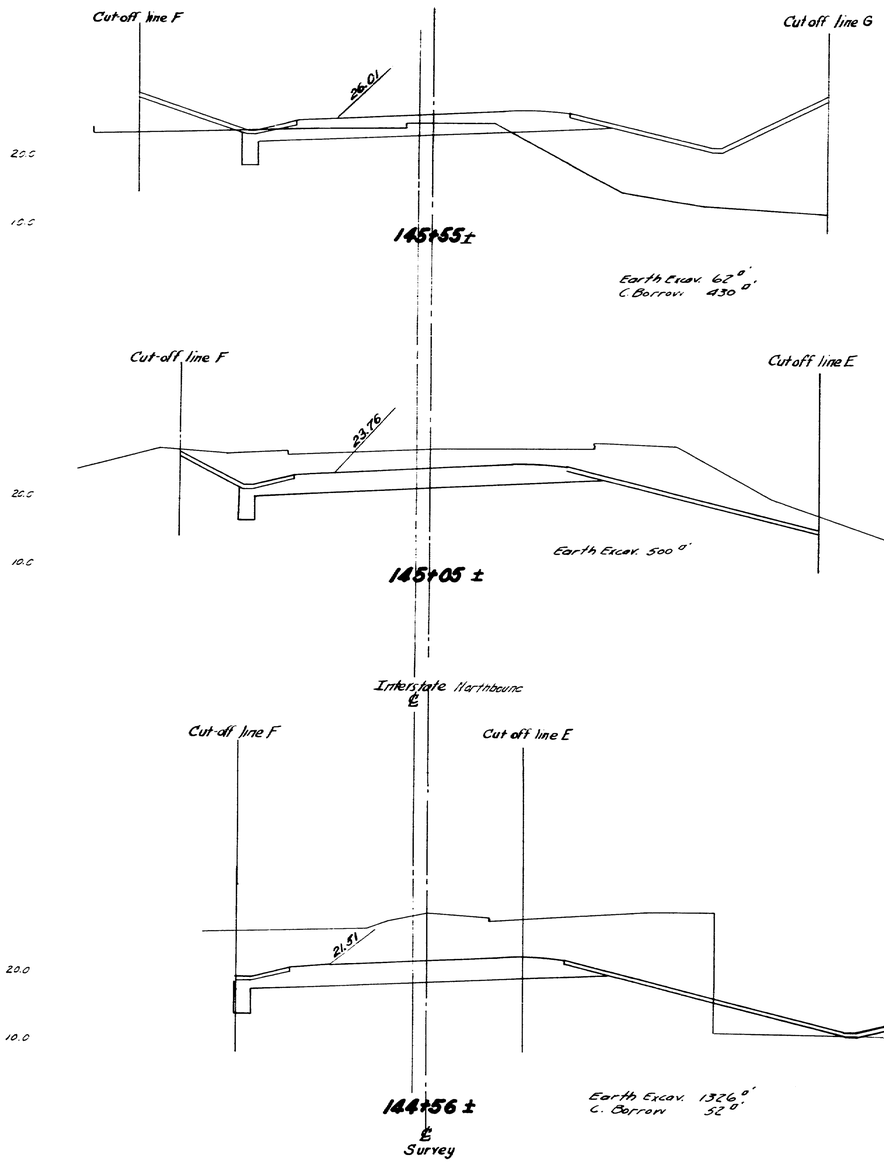
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

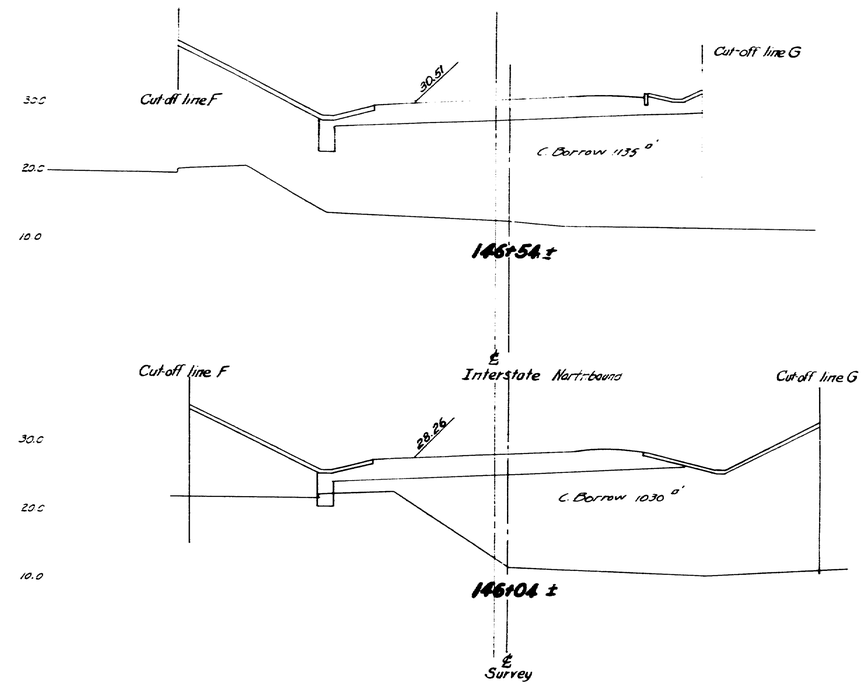
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 149 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-149

B.P.R. SEC. NO.	STATE	F.A. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	~~S 002-1(4)~~	150	166





DESIGN-BARNES TRACE-MORRISON CHECK-MORRISON	BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

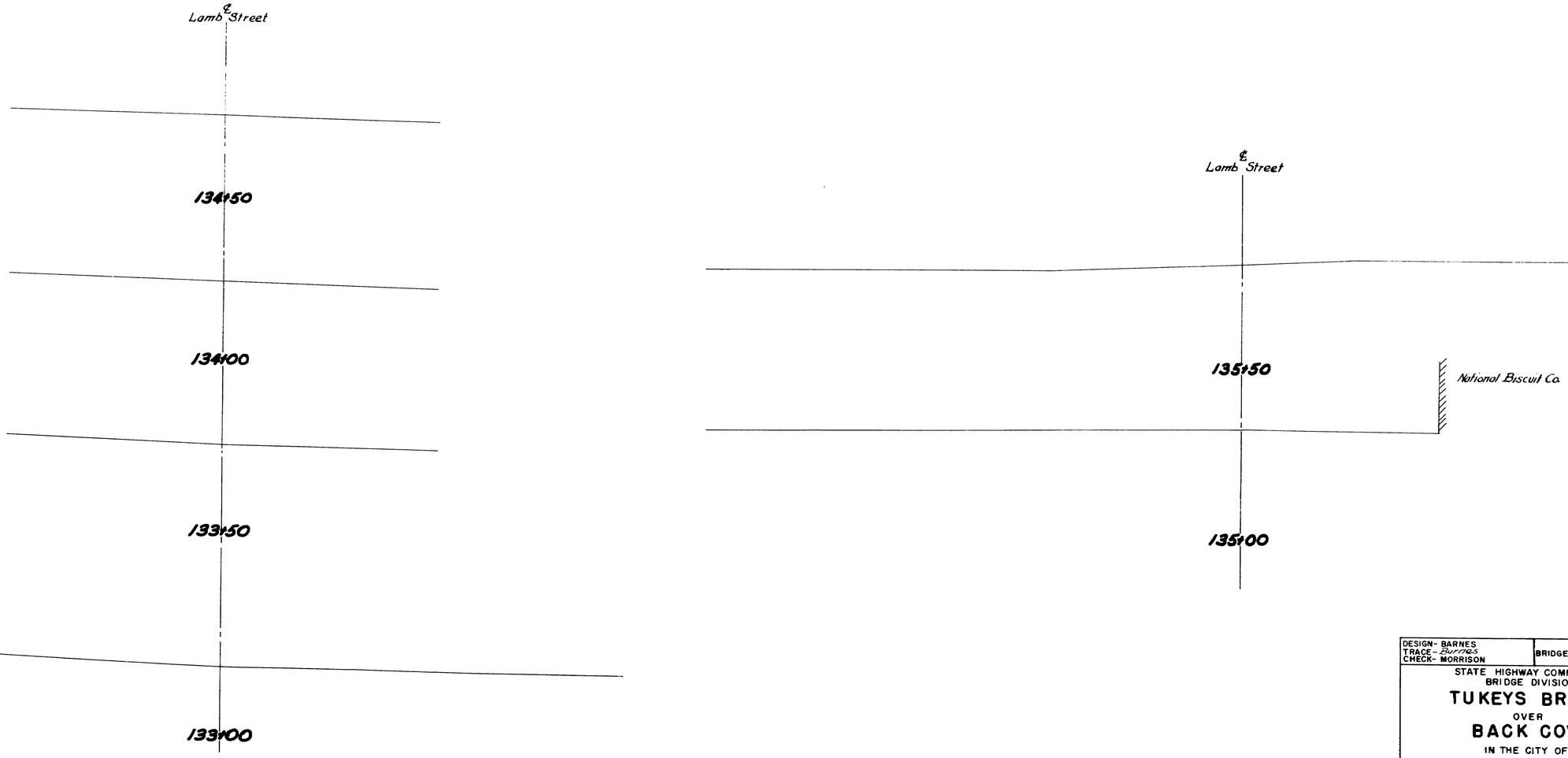
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 150 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-150

0 1 2 3 4 5 INCHES

F P R NO.	STATE	FED. AID NO.	SHEET NO.	TOTAL SHEETS
	MAINE	~~F-008-1(4)~~ 151		166



DESIGN- BARNES TRACE- Burrus CHECK- MORRISON	BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

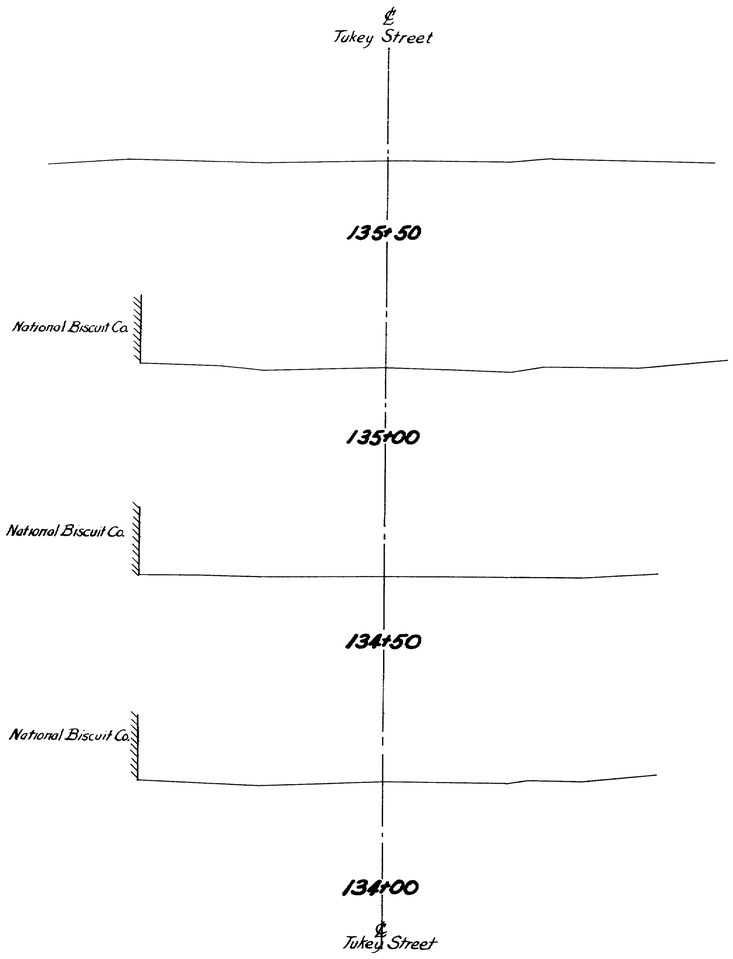
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

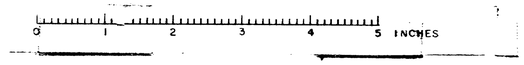
SHEET 151 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-151

0 1 2 3 4 5 INCHES

B.P.R. REC. No.	STATE	SHEET No.	TOTAL SHEETS
1	MAINE	~~140-144~~ 152	166





DESIGN- BARNES
TRACE- Barnes
CHECK- MORRISON

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

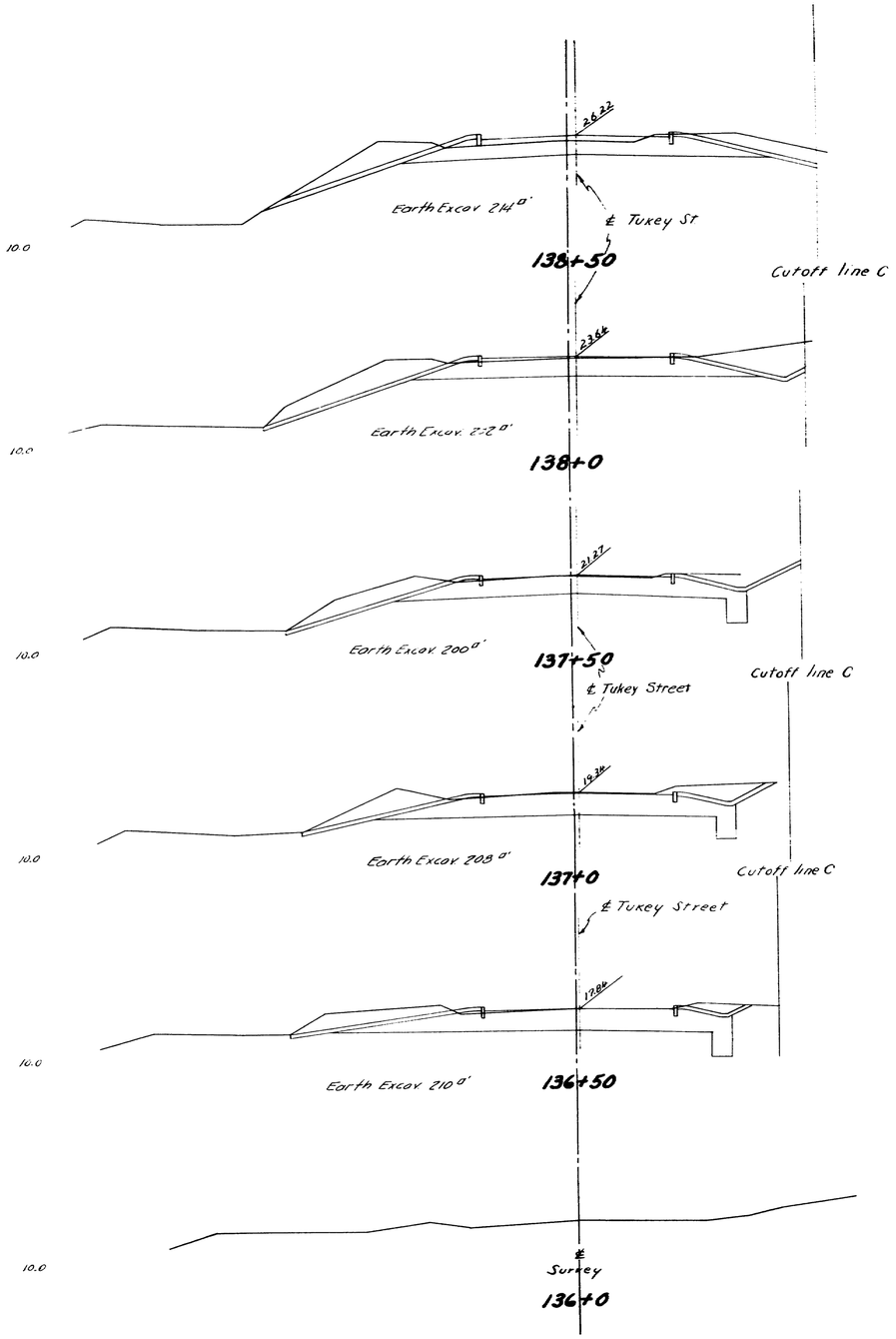
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

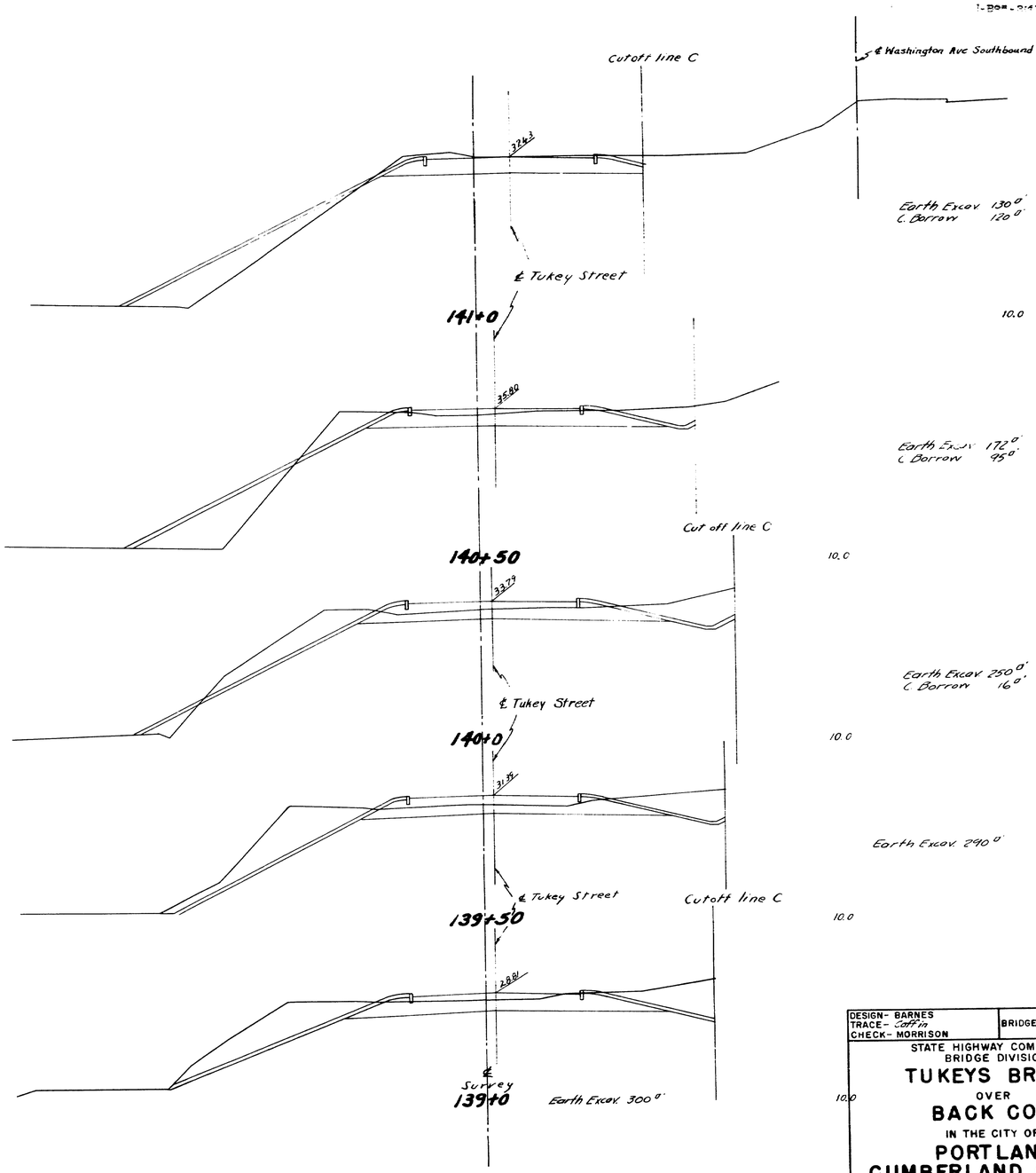
SHEET 152 OF 166 AUGUSTA, MAINE, OCT. 1957.

76-152

ROUTE NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	~~F-020-1(13)~~	153	166

1-20=2141.50





0 1 2 3 4 5 INCHES

DESIGN- BARNES
TRACE- [illegible]
CHECK- MORRISON

BRIDGE NO.

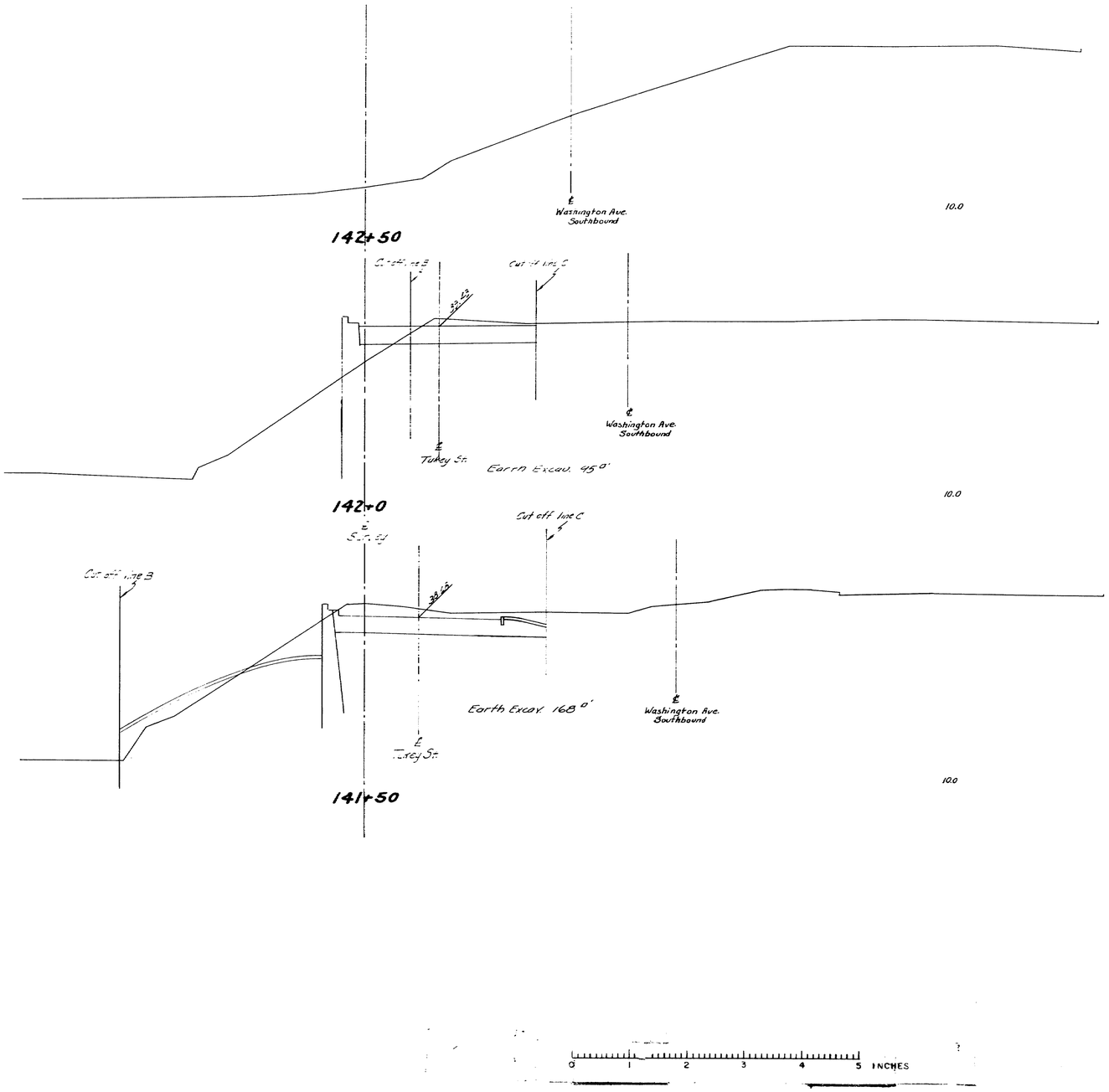
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 153 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-153

B.P.R. REF. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
	MAINE	~~F-008-1(6)~~ I-295-2(4) 50	54	166



0 1 2 3 4 5 INCHES

DESIGN- BARNES
TRACE- JPC
CHECK- MORRISON

BRIDGE NO.

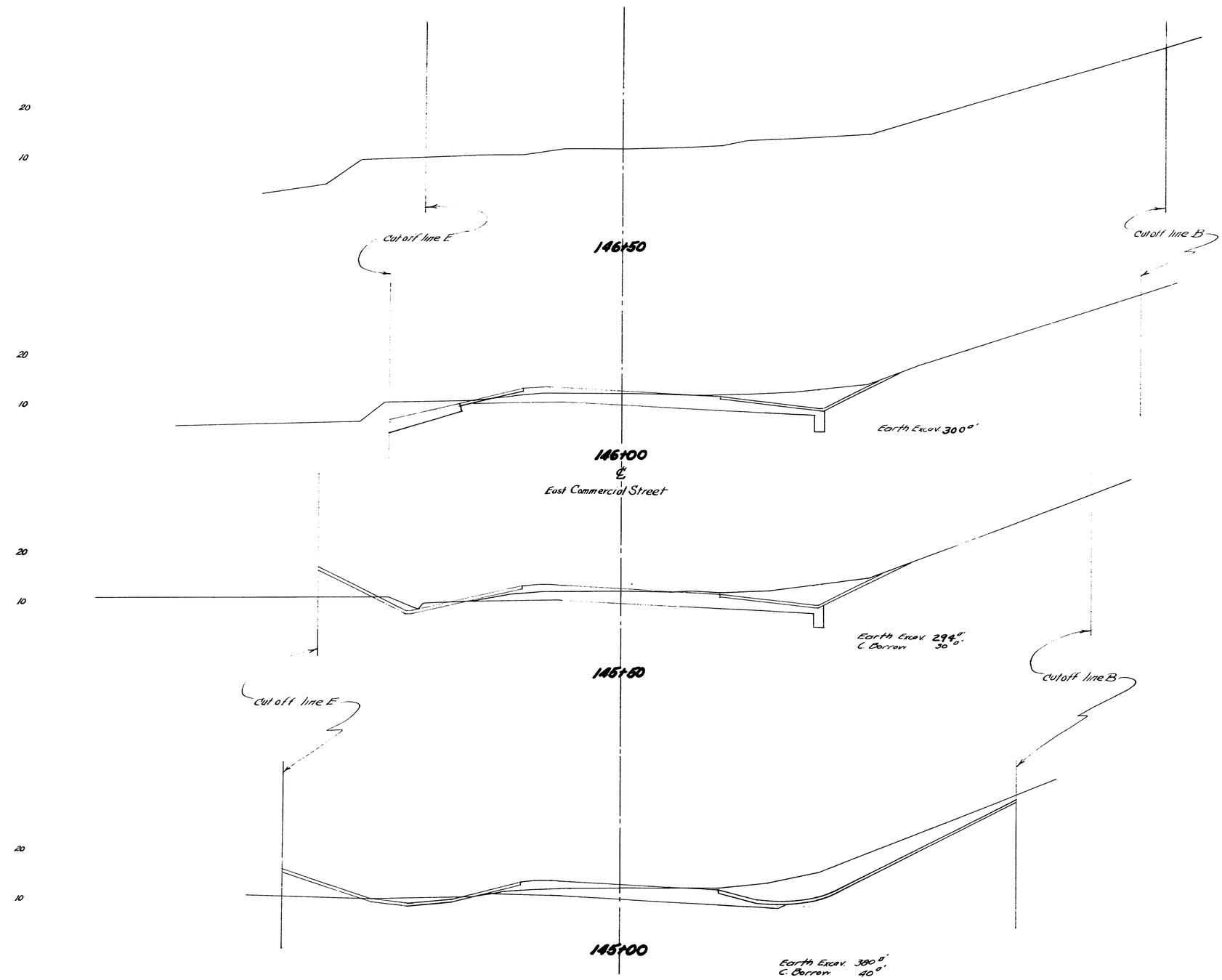
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 154 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-154

REG NO. STATE ... SHEET ... OF ...
MAINE ~~1-005-1(4) 101~~ 195 166
I-005-3(4) 50



0 1 2 3 4 5 INCHES

DESIGN- BARNES
TRACE- Coffin
CHECK- MORRISON

BRIDGE NO.

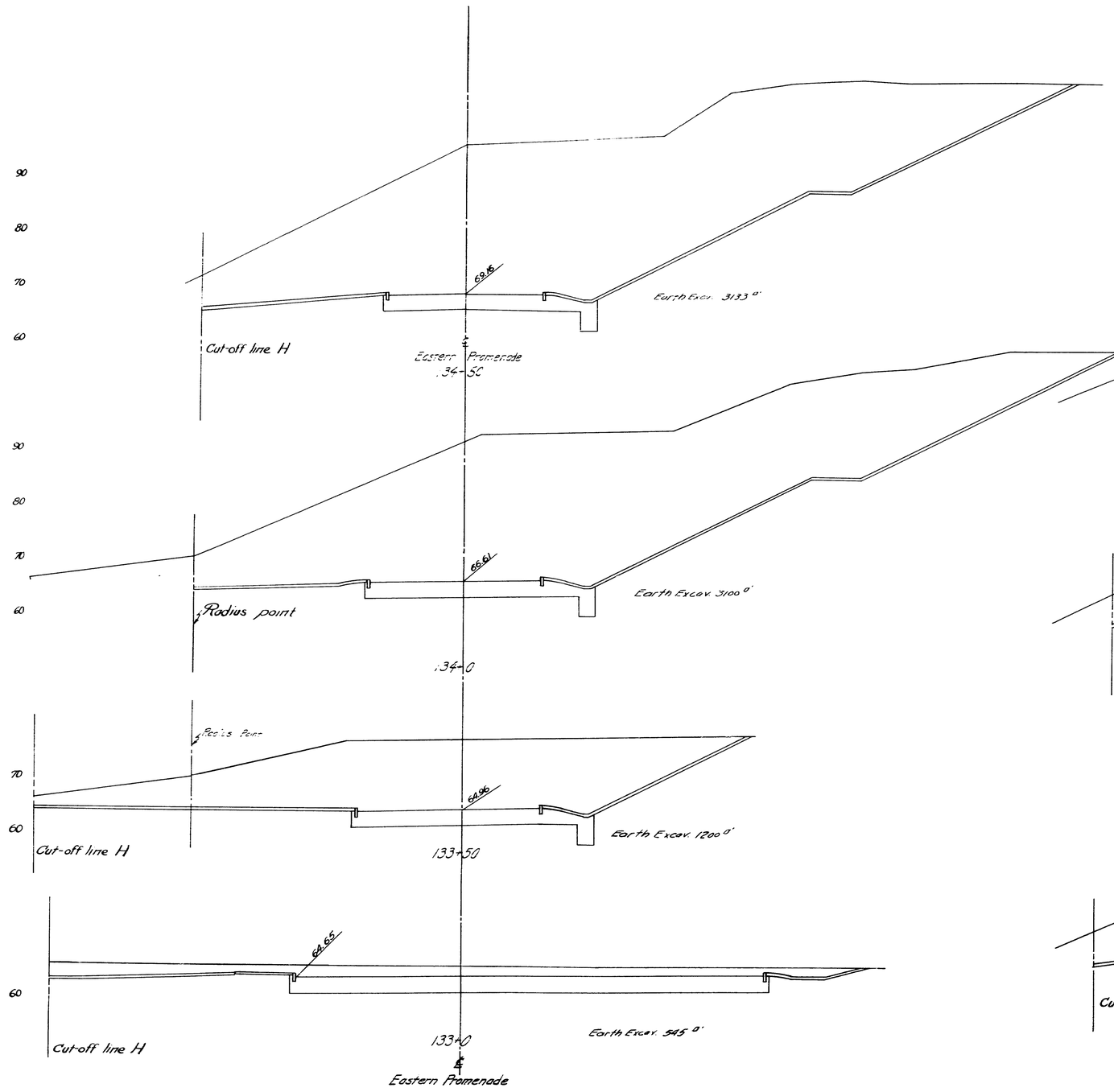
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

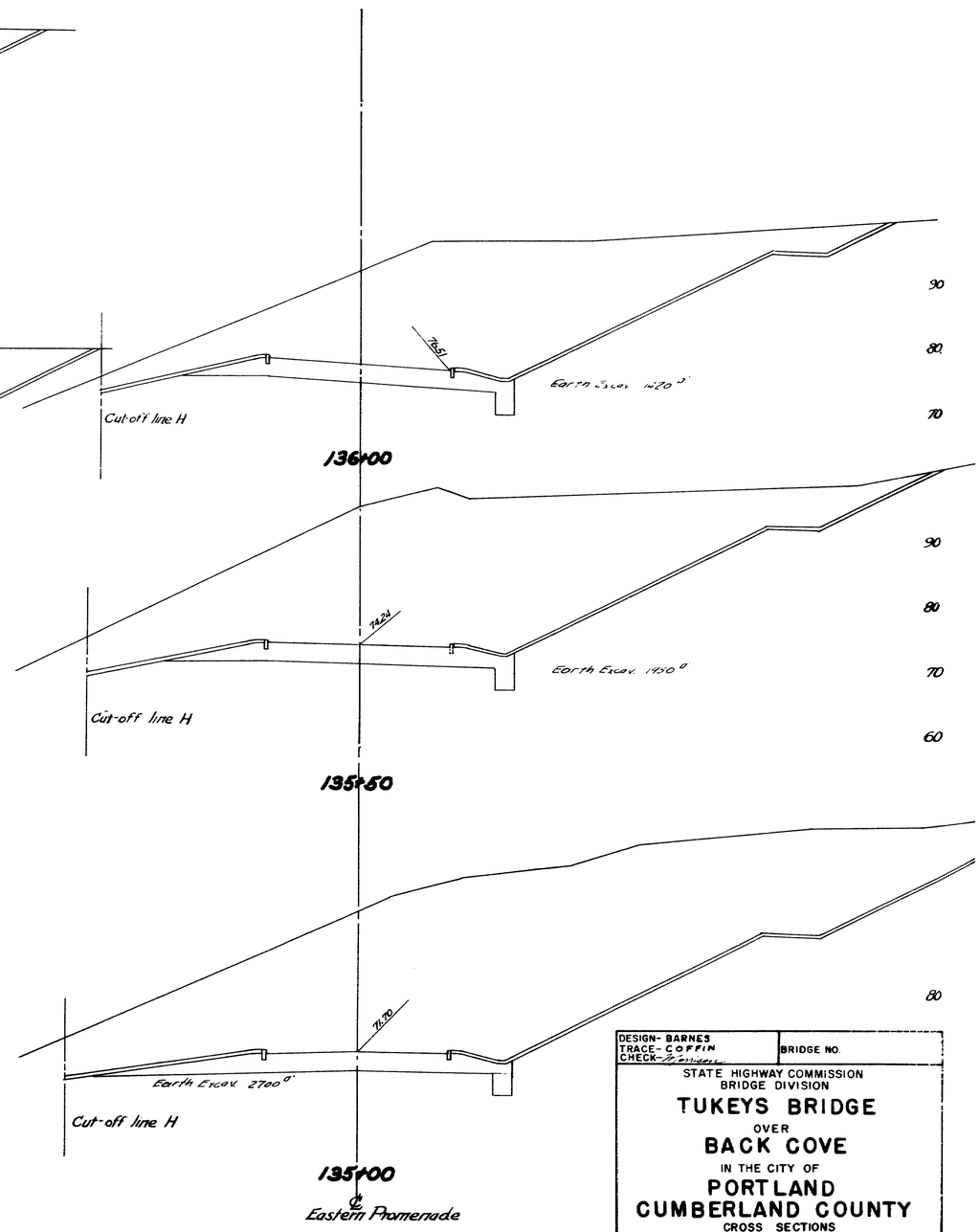
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 133 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-155

PROJECT NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
REG. NO.	MAINE	~~F-080-1(4)~~	156	166





0 1 2 3 4 5 INCHES

DESIGN- BARNES
TRACE- COFFIN
CHECK- [illegible]

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

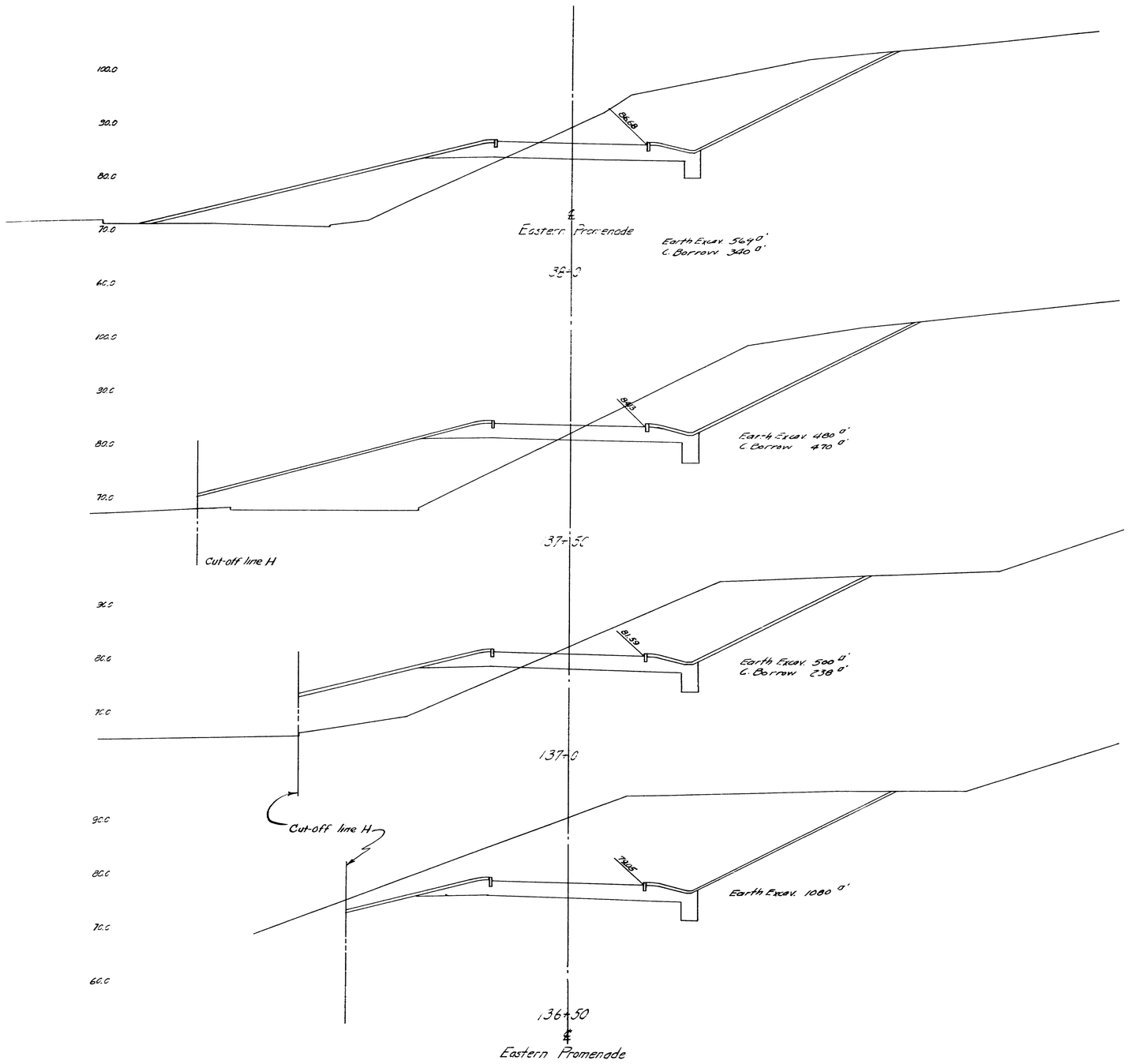
CROSS SECTIONS

SHEET 156 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-156

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MAINE	~~F-068-1(6)~~	157	166

I-295-3(14) en



0 1 2 3 4 5 INCHES

DESIGN- BARNES
TRACE-
CHECK-

BRIDGE NO.

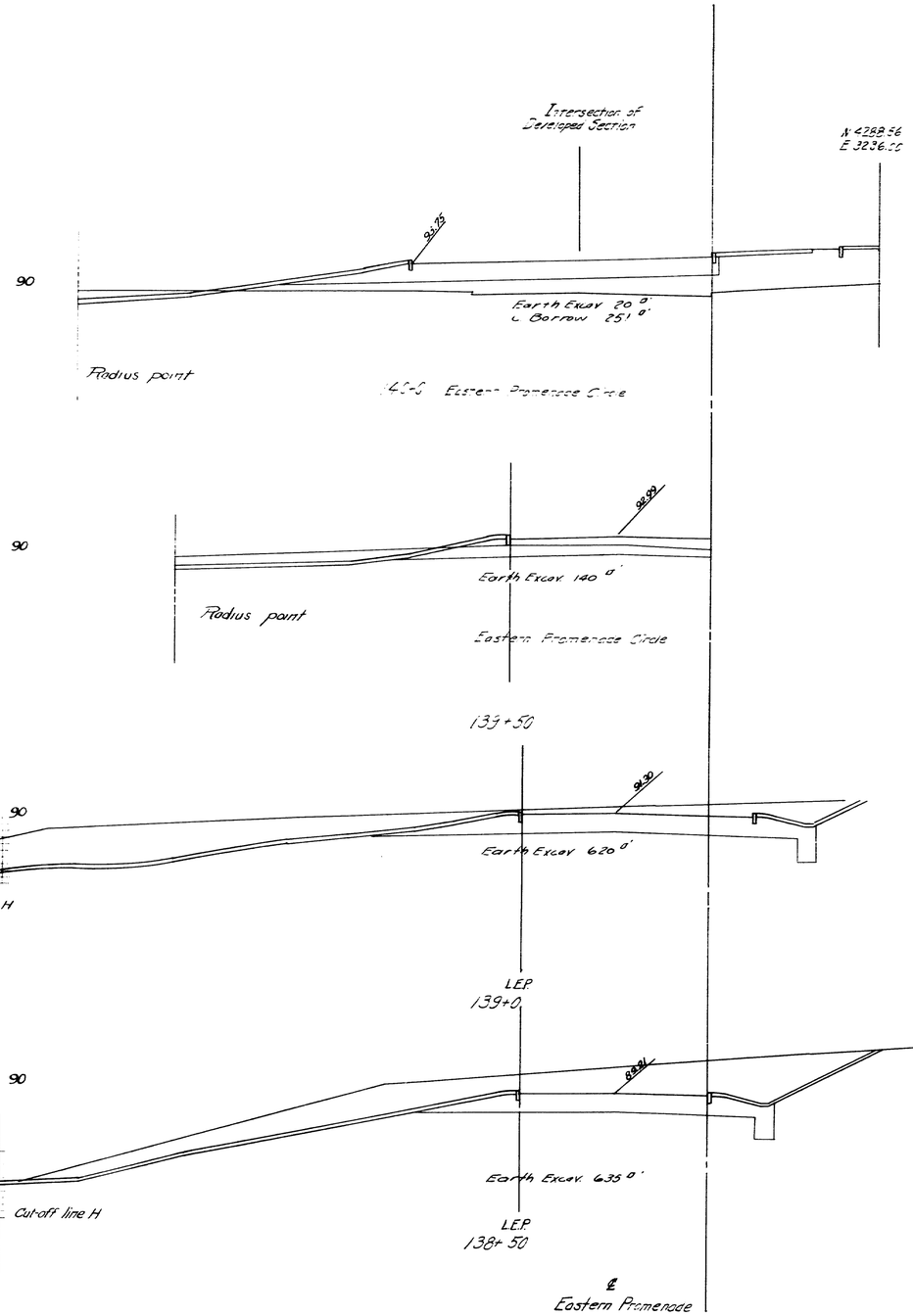
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

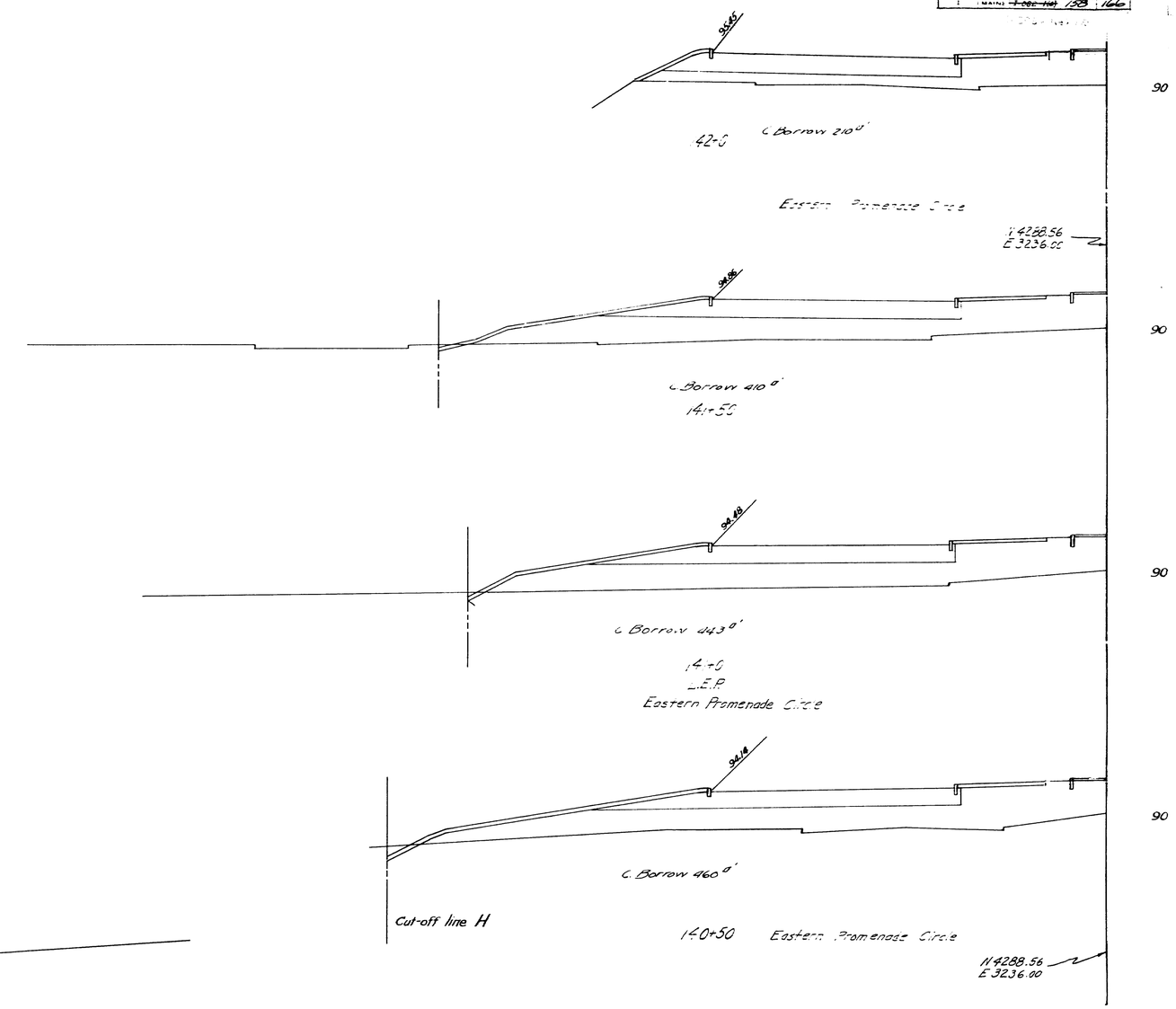
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 157 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-157

BPR REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE ~~F-202-1(4)~~		158	166





DESIGN - BARNES
TRACE -
CHECK -

BRIDGE NO.

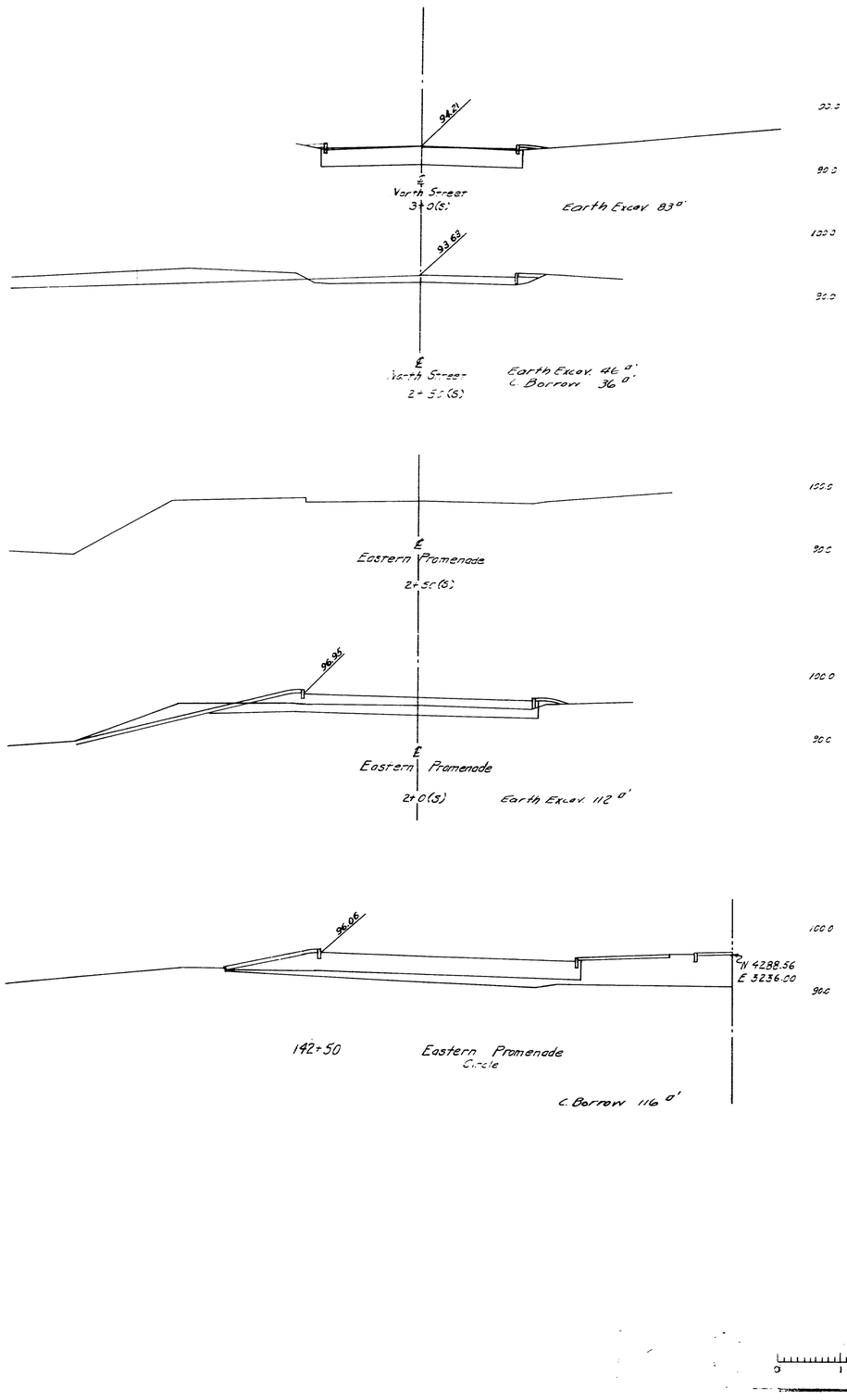
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

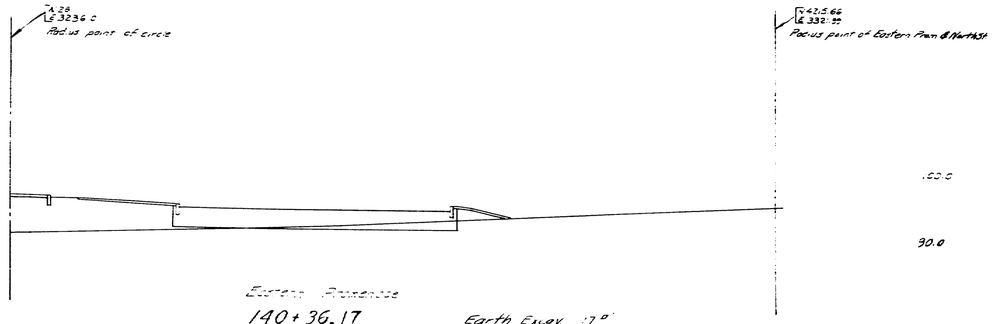
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

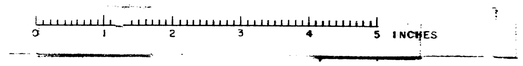
SHEET 158 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-158

0 1 2 3 4 5 INCHES







DESIGN- BARNES
TRACE- Griffin
CHECK- H. Goodwin

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

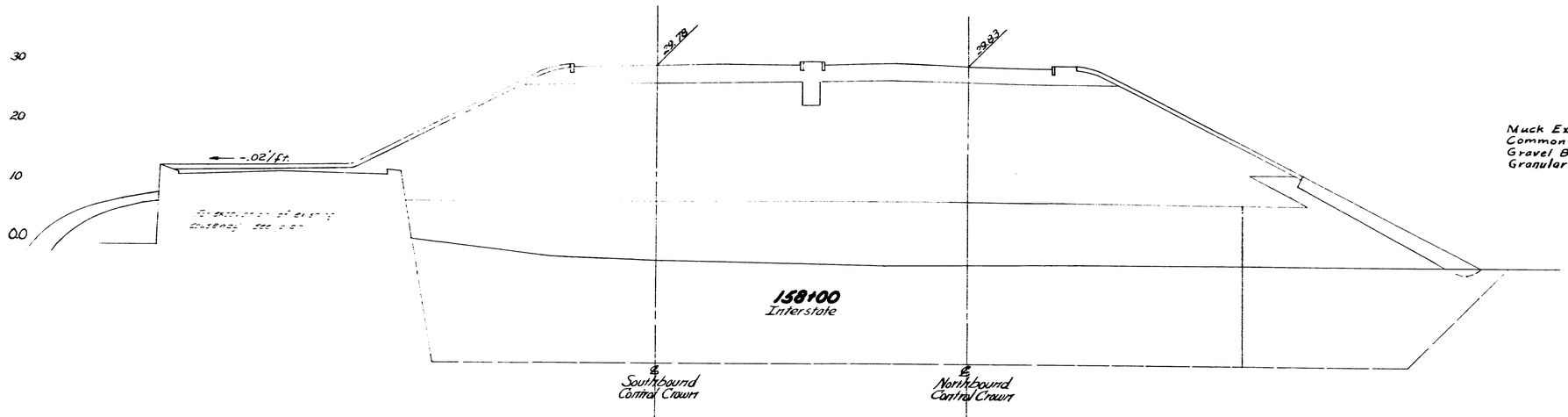
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 134 OF 166 AUGUSTA, MAINE. OCT. 1957.

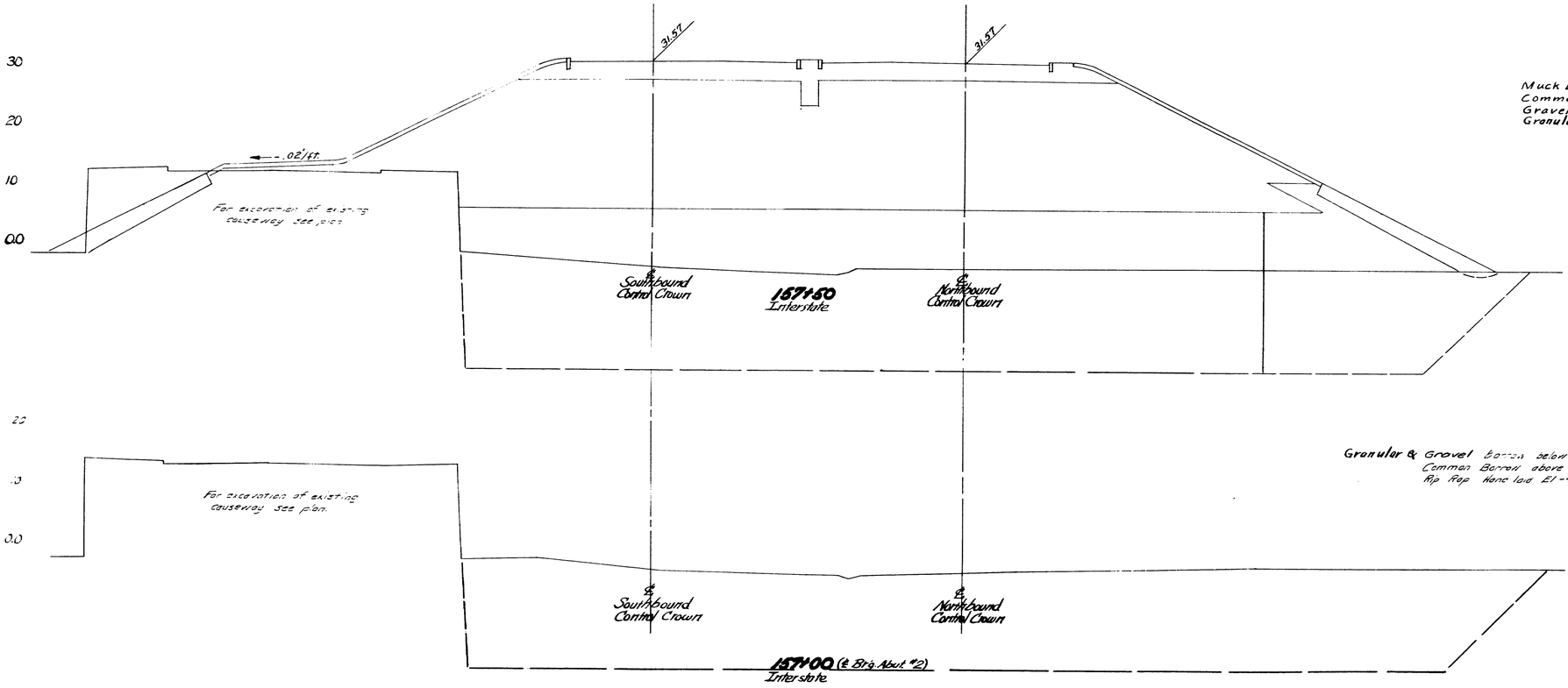
76-159

F.A. RTE. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	F008-1(4)	160	166

BDF-F 31 50

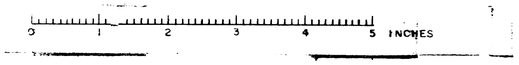


Muck Excavation 2930 c.y.
Common Borrow 2665 c.y.
Gravel Borrow 890 c.y.
Granular Borrow 3723 c.y.



Muck Excavation 2933 c.y.
Common Borrow 2914 c.y.
Gravel Borrow 890 c.y.
Granular Borrow 3590 c.y.

Granular & Gravel Borrow below El. 7.0
Common Borrow above El. 7.0
Rip Rap Hand laid El -4.5 to 12.0



DESIGN- MORRISON
TRACE- Coffin
CHECK- BARNES

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

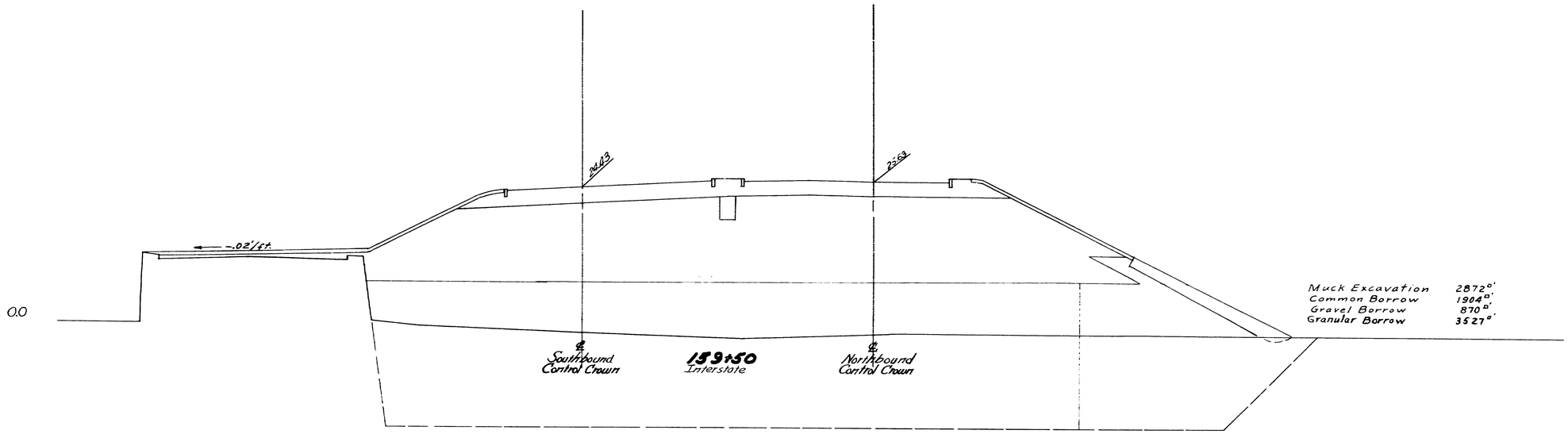
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 160 OF 166 AUGUSTA, MAINE. OCT. 1957.

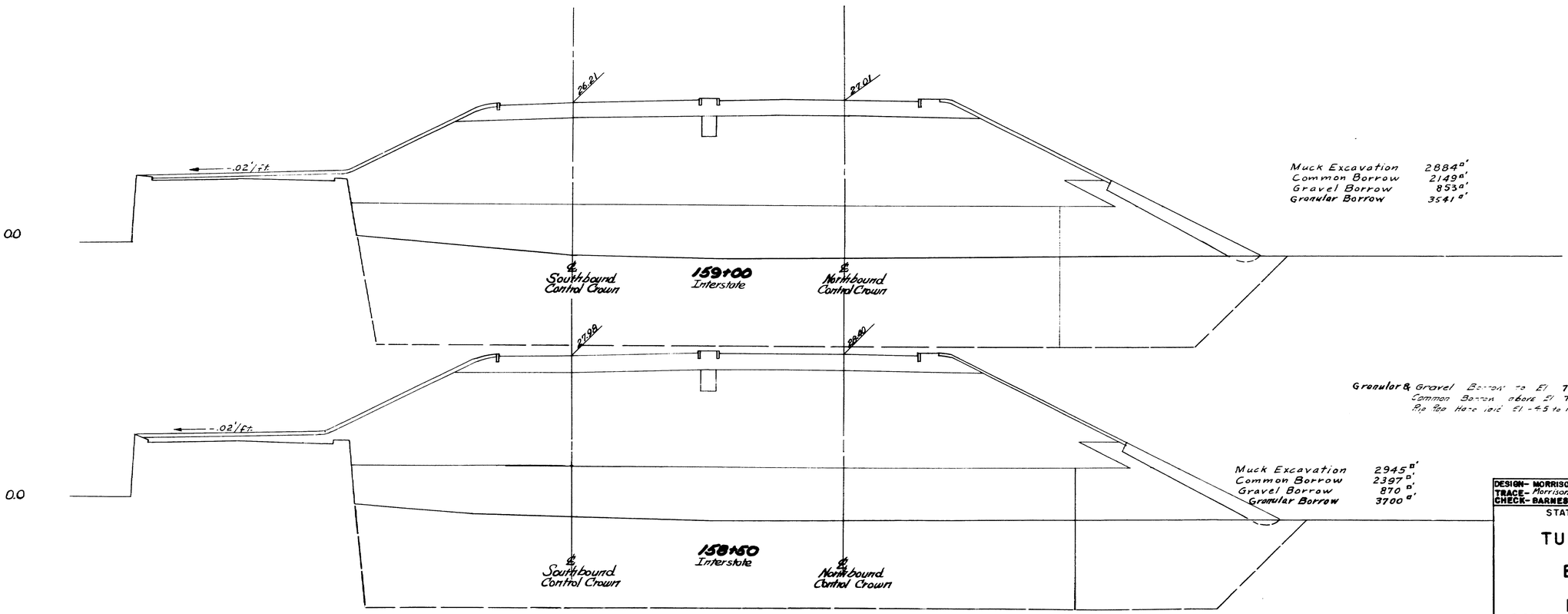
76-160

U. S. & REG. NO.	STATE	FED. AID NO.	SHEET NO.	TOTAL SHEETS
	ME.	F-002-1(7)	161	166

I-BRS-1(41)50



Muck Excavation 2872 c.y.
Common Borrow 1904 c.y.
Gravel Borrow 870 c.y.
Granular Borrow 3527 c.y.



Muck Excavation 2884 c.y.
Common Borrow 2149 c.y.
Gravel Borrow 853 c.y.
Granular Borrow 3541 c.y.

Granular & Gravel Borrow to El. 7.0
Common Borrow above El. 7.0
No Test Holes laid El. -4.5 to 12.0

Muck Excavation 2945 c.y.
Common Borrow 2397 c.y.
Gravel Borrow 870 c.y.
Granular Borrow 3700 c.y.

DESIGN- MORRISON
TRACE- Morrison
CHECK- BARNES

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

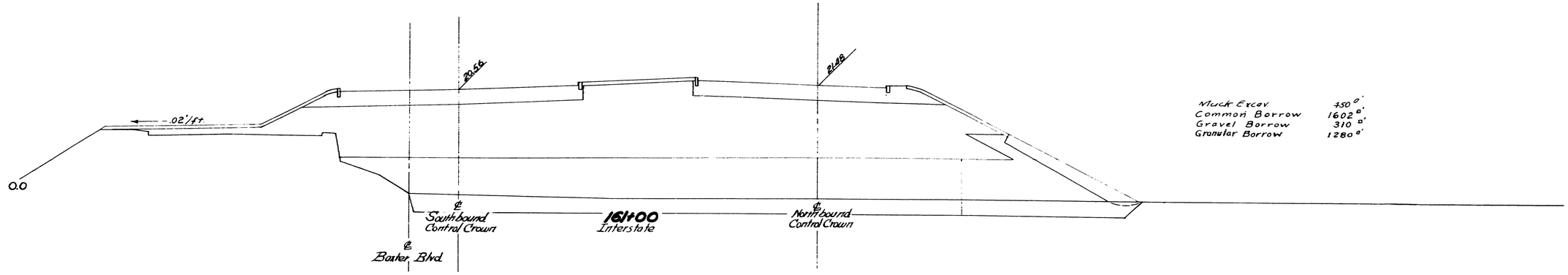
CROSS SECTIONS

SHEET 161 OF 166 AUGUSTA, MAINE. OCT. 1957

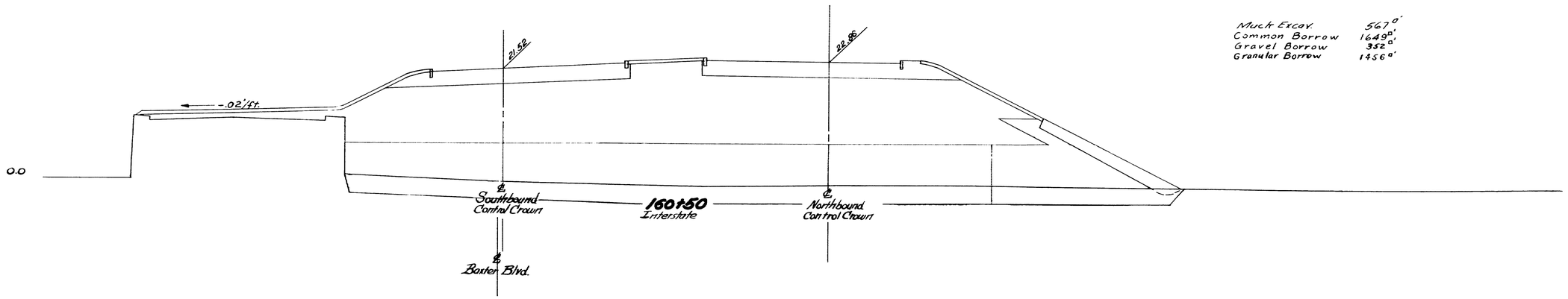
76-161

0 1 2 3 4 5 INCHES

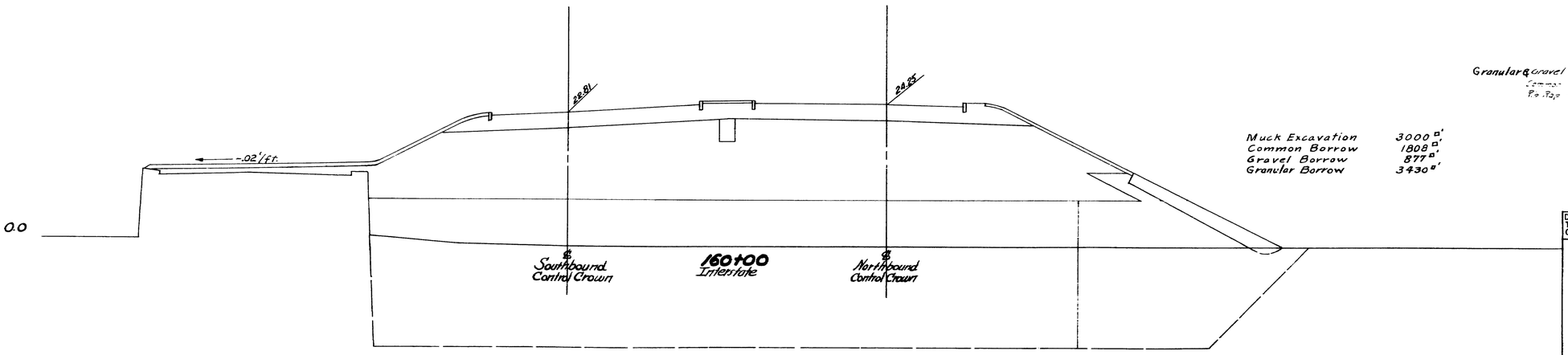
B.P.R. REF. NO.	STATE	FED. AID P.-O. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	~~F-020-1(6)~~	162	166



Muck Excav.	450 C.Y.
Common Borrow	1602 C.Y.
Gravel Borrow	310 C.Y.
Granular Borrow	1280 C.Y.



Muck Excav.	567 C.Y.
Common Borrow	1649 C.Y.
Gravel Borrow	352 C.Y.
Granular Borrow	1456 C.Y.



Granular & Gravel Borrow to El 7.0
Common Borrow above El 7.0
Portion not in E-45-3-120

Muck Excavation	3000 C.Y.
Common Borrow	1808 C.Y.
Gravel Borrow	877 C.Y.
Granular Borrow	3430 C.Y.

0 1 2 3 4 5 INCHES

DESIGN- MORRISON
TRACE- Morrison
CHECK- BARNES

BRIDGE NO.

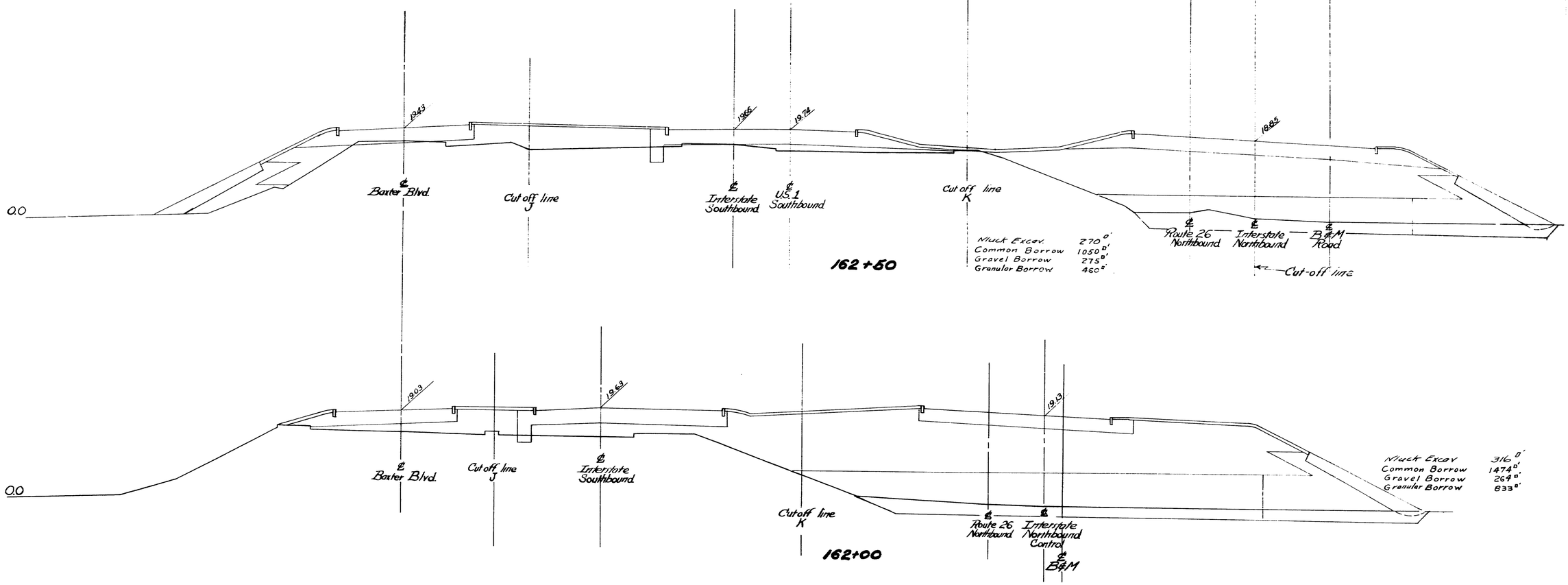
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

SHEET 162 OF 166 AUGUSTA, MAINE. OCT. 1957.

76-162

N.P.R. No.	STATE	F.A.P. No.	SHEET No.	TOTAL SHEETS
	MAINE	~~FAP 164~~	163	166



0 1 2 3 4 5 INCHES

DESIGN- MORRISON
TRACE- MORRISON
CHECK- BARNES

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

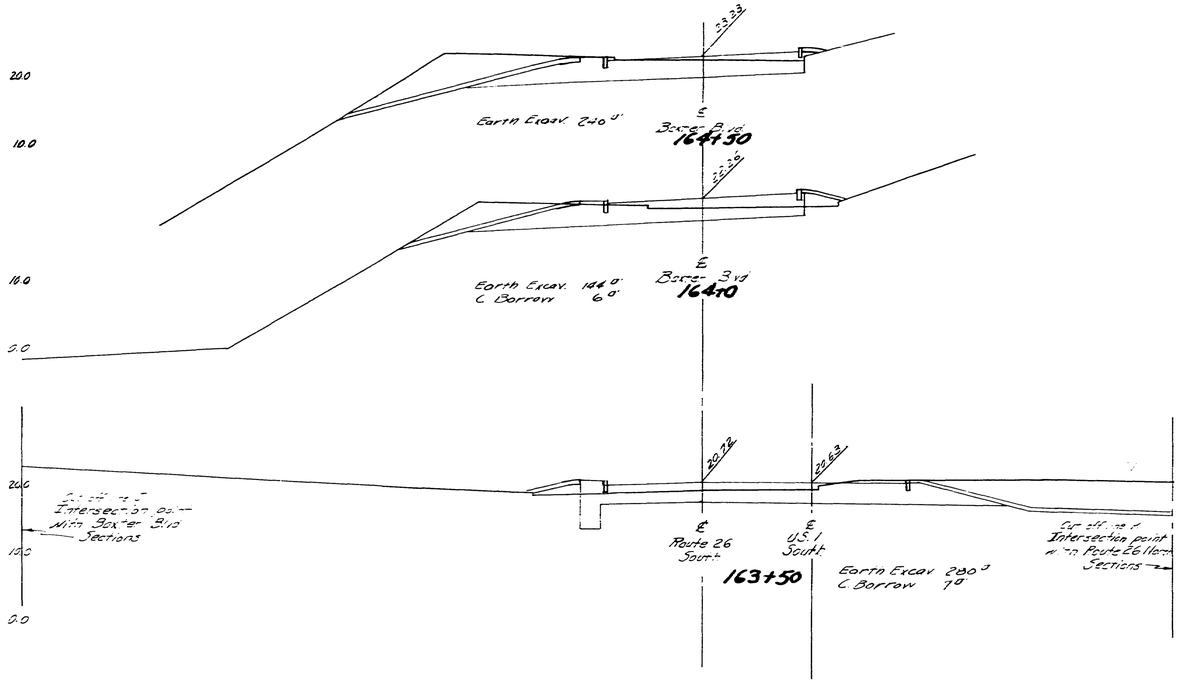
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY

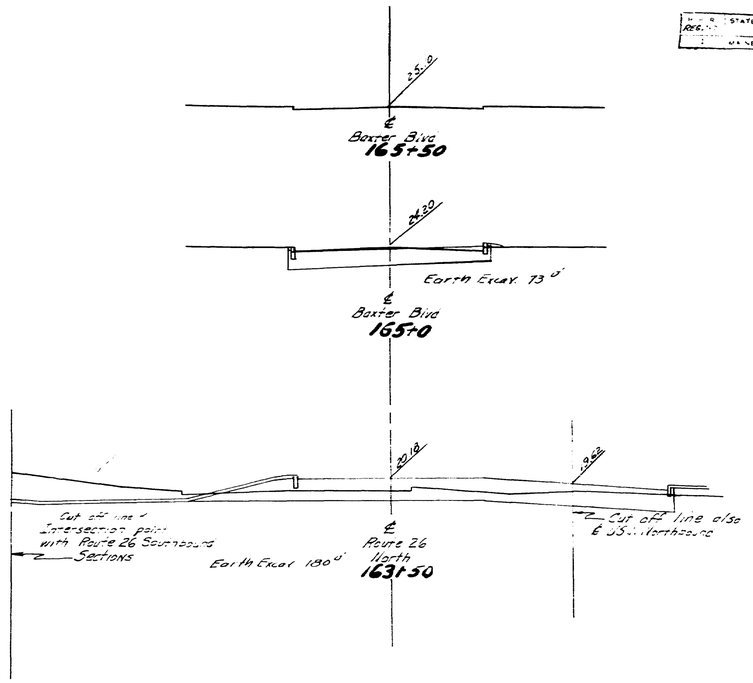
CROSS SECTIONS

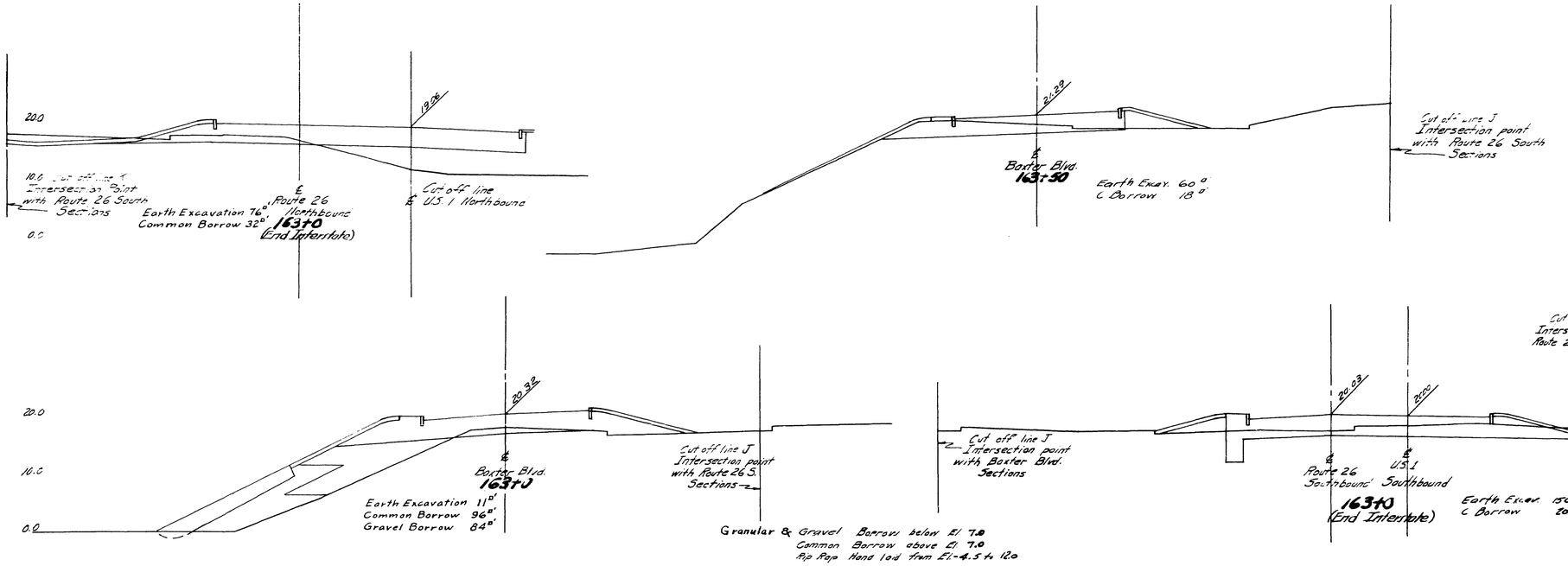
SHEET 163 OF 166 AUGUSTA, MAINE OCT. 1957.

76-163

NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
REG.	MAINE	~~F-002-1(6)~~	164	166







Granular & Gravel Borrow below El. 7.0
Common Borrow above El. 7.0
Rip Rap Hand laid from El.-4.5 to 12.0

0 1 2 3 4 5 INCHES

DESIGN- MORRISON
TRACE- Off-
CHECK- BARNES

BRIDGE NO.

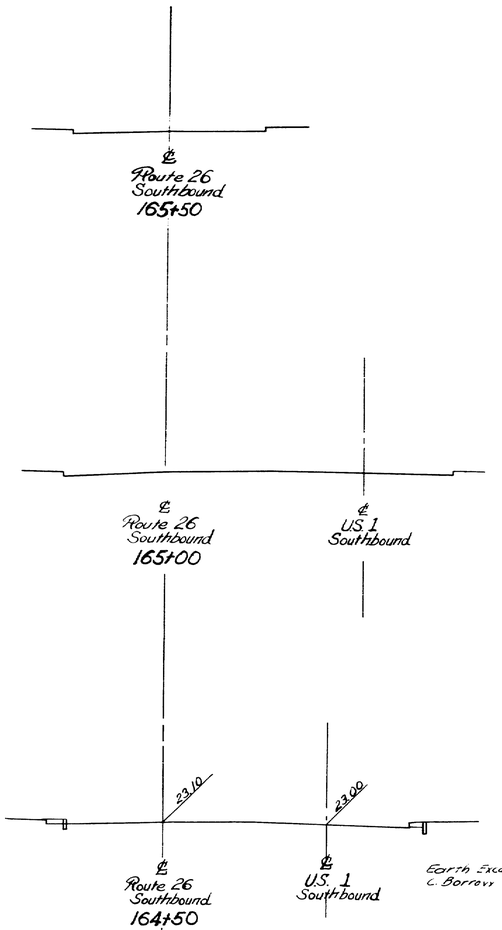
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

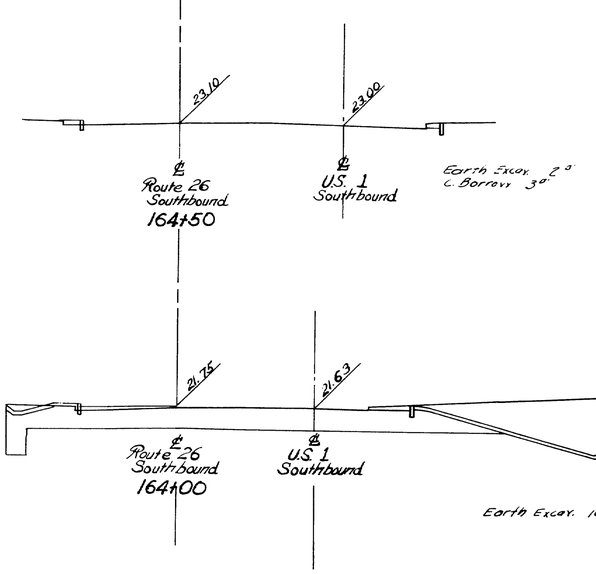
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

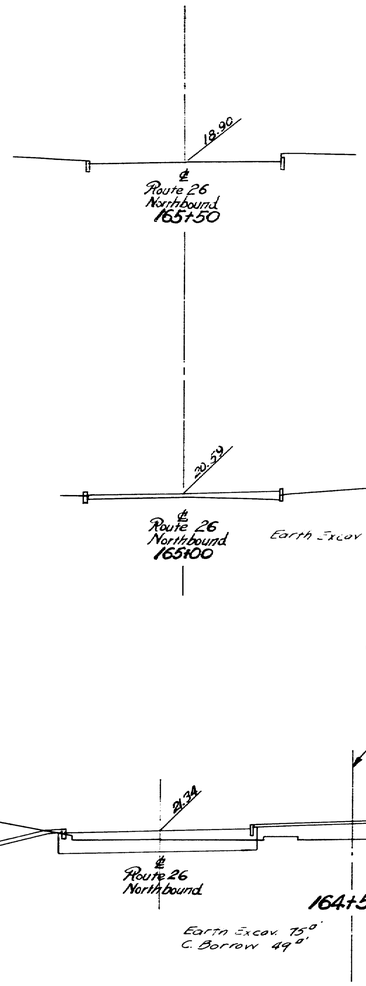
SHEET 164 OF 166 AUGUSTA, MAINE, OCT. 1957.

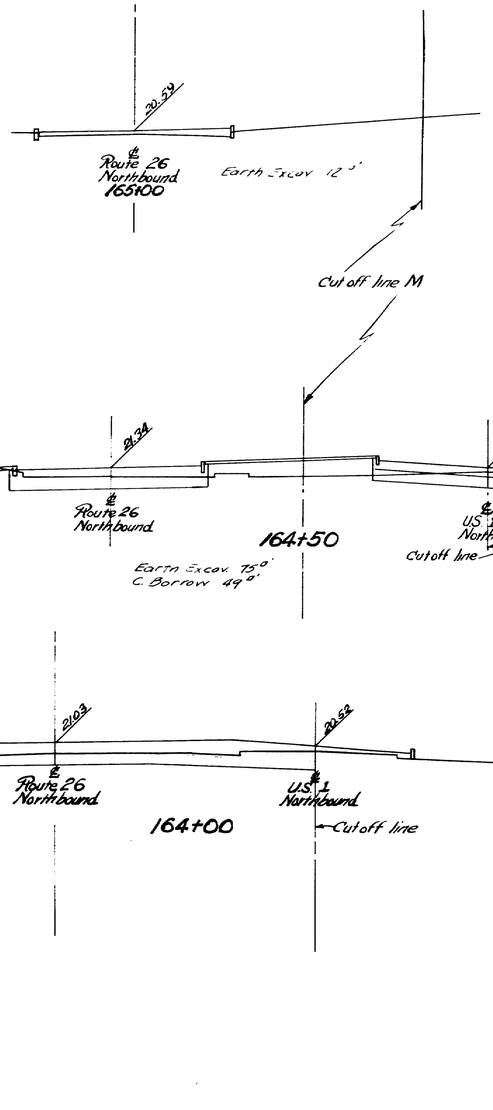
76-164

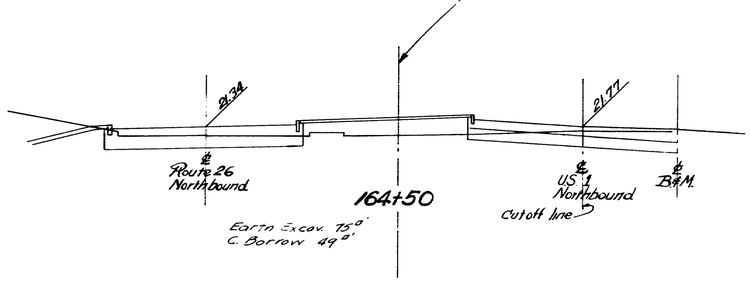
U.P.R. REG. NO.	STAT.	F.A. NO. P.C. NO.	SHEET NO.	SHEETS
1	MAINE	~~S 083-1(10)~~	165	166

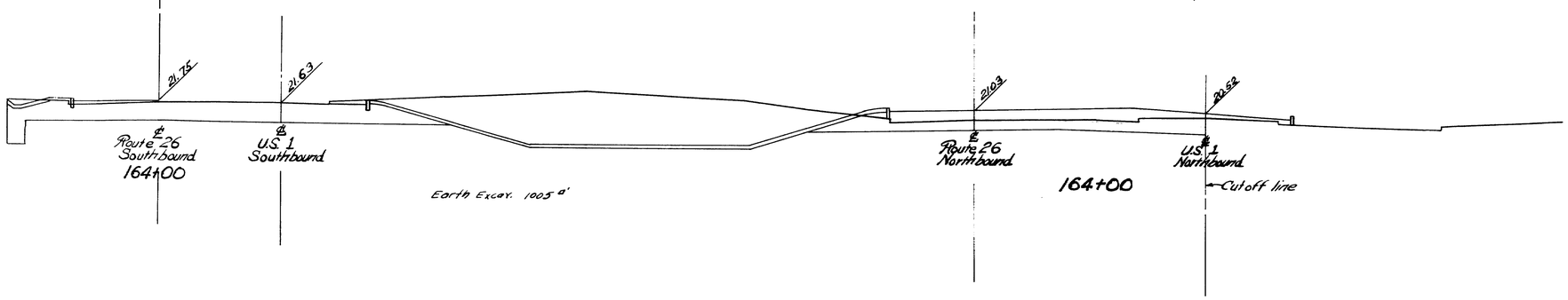












DESIGN- MORRISON TRACE- Morrison CHECK- BARNES	BRIDGE NO.

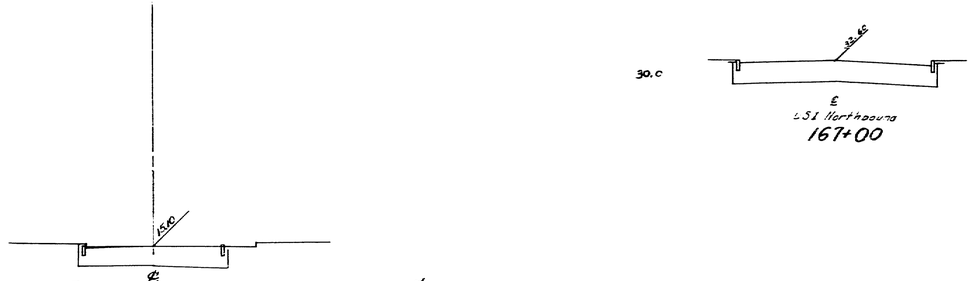
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

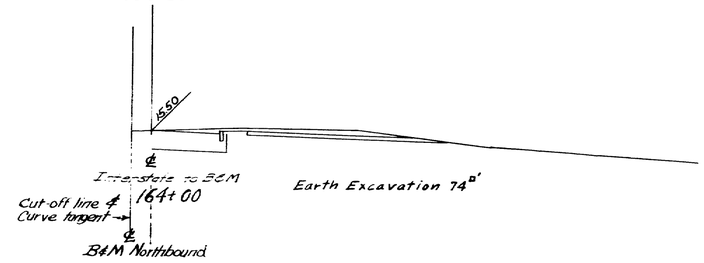
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

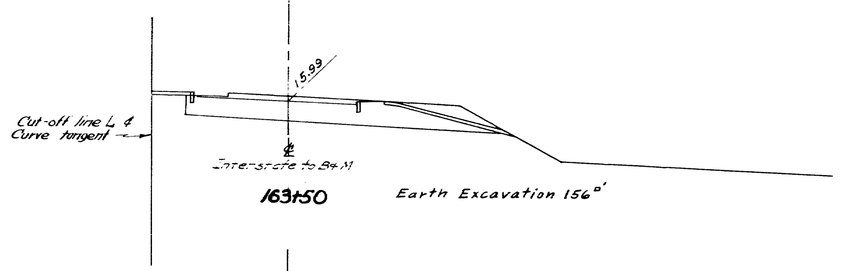
SHEET 165 OF 166 AUGUSTA, MAINE. OCT. 1957.

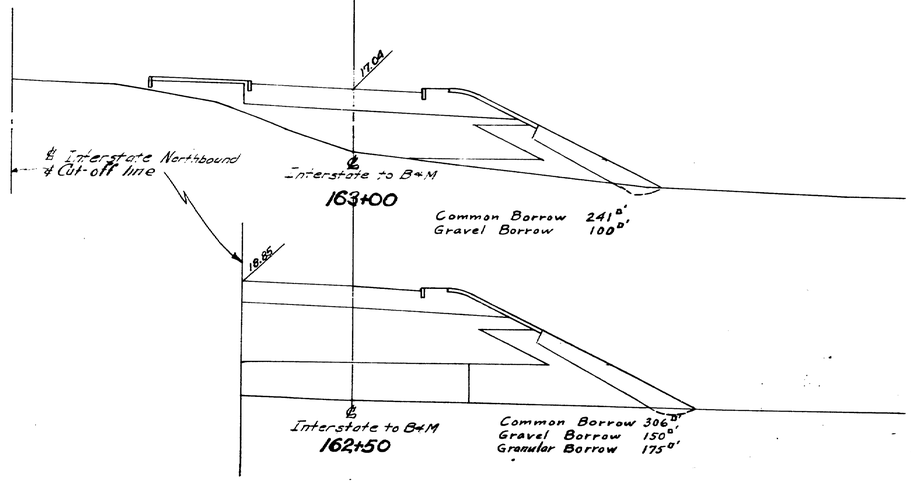
76-165

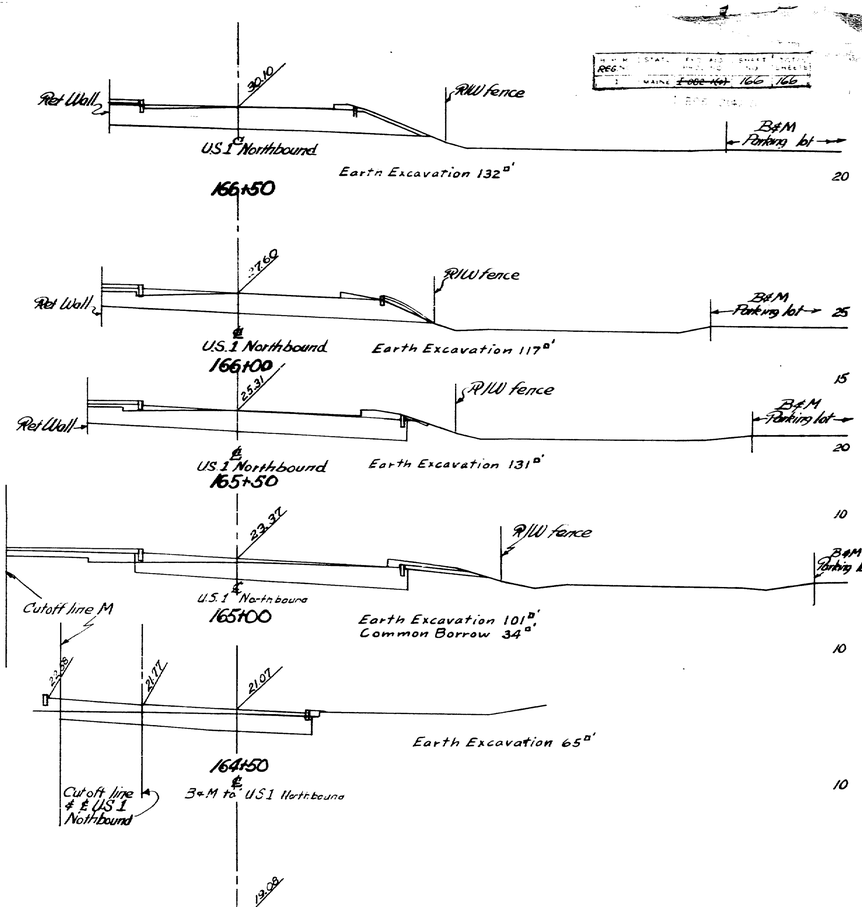
0 1 2 3 4 5 INCHES











Granular & Gravel Borrow Below El 7.0
Common Borrow above El 7.0
Rip Rap Hand laid from El -4.5 to 12.0

REG.	STATE	FED. AID	SHEET	TOTAL	
	MAINE	PROJ. NO.	NO.	SHEETS	
			166	166	

DESIGN- MORRISON
TRACE- [illegible]
CHECK- BARNES

BRIDGE NO.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

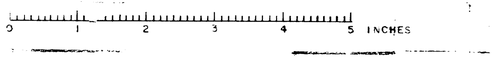
TUKEYS BRIDGE
OVER
BACK COVE
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS SECTIONS

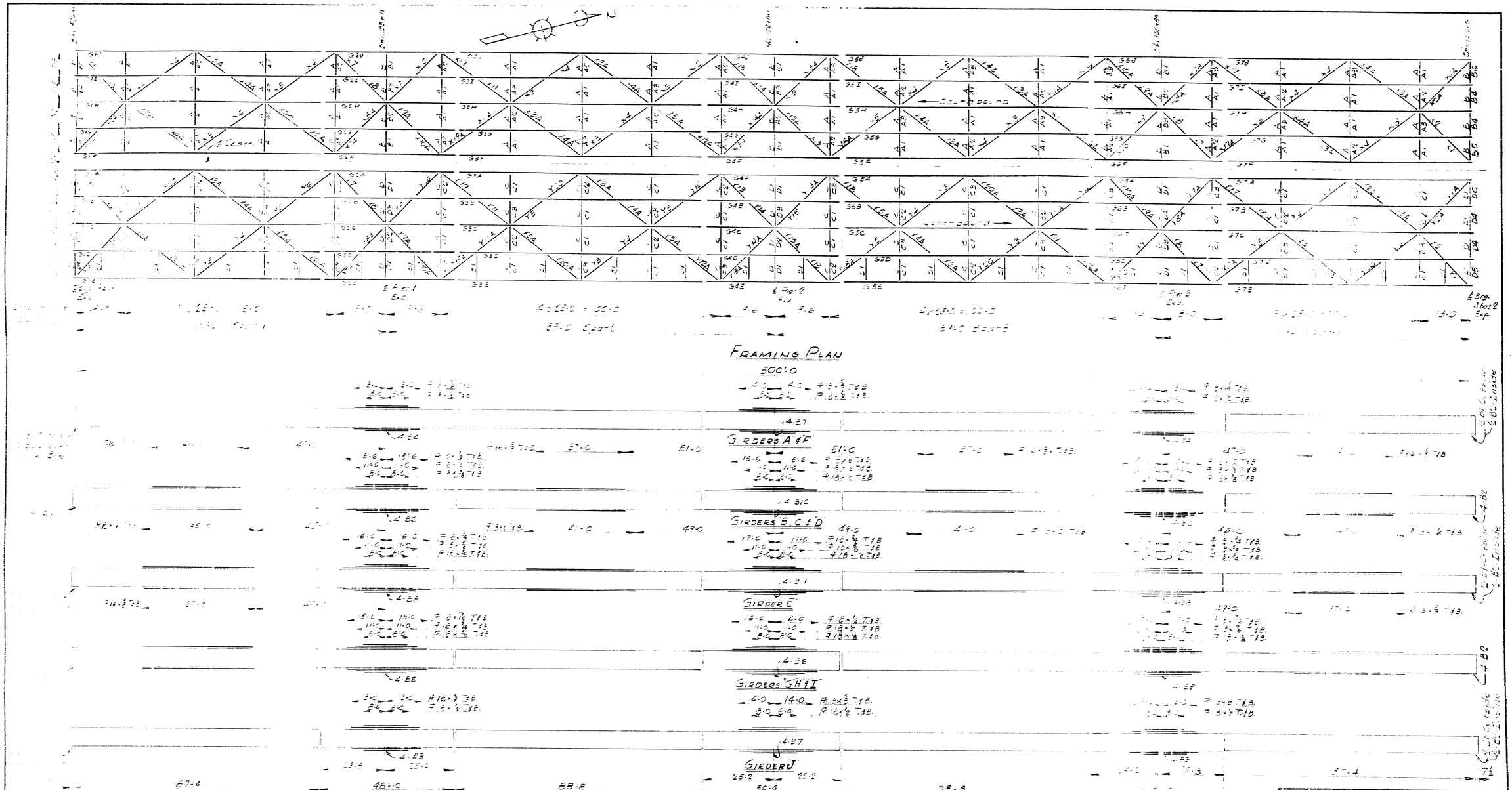
SHEET 166 OF 166 AUGUSTA, MAINE, OCT. 1957

76-166

0 1 2 3 4 5 INCHES

0
1
2
3
4
5 INCHES


0
1
2
3
4
5 INCHES



DRAWN	5-9-58	J.P.F.
REVISION		
REVISION		
REVISION		

FRAMING PLAN

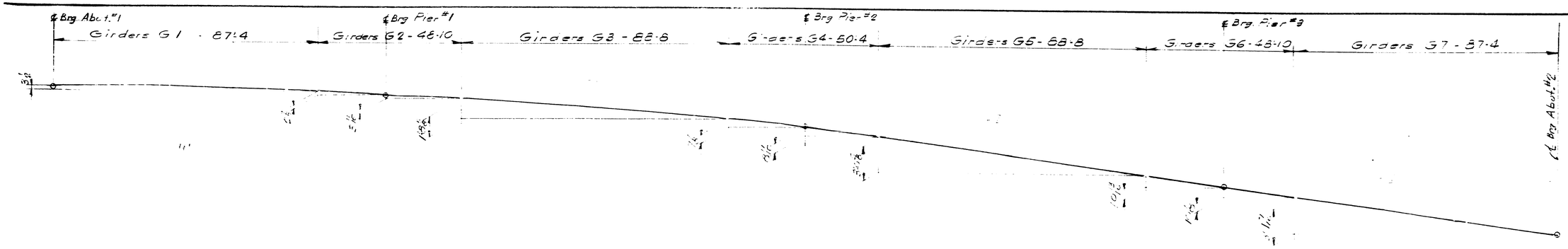
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEYS BRIDGE
PORTLAND, MAINE

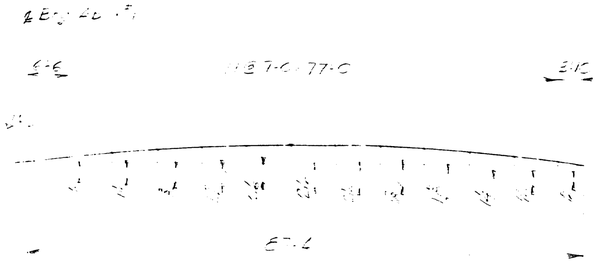
CUSTOMER W. H. HINMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.

ORDER NO. VERBAL | DWG. NO. 8-164-E1

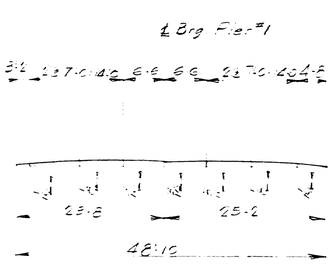
76-167



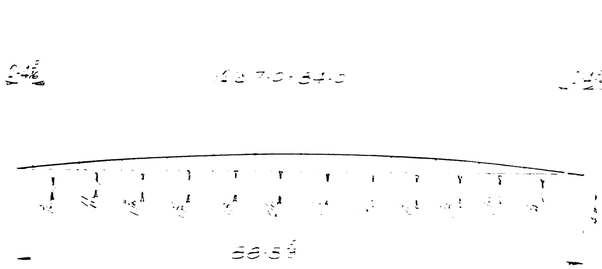
PROFILE FOR ℄ OF GIRDERS



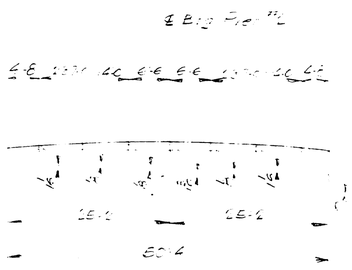
CAMBER - GIRDERS G1



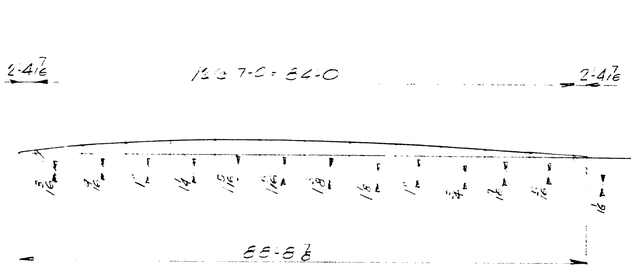
CAMBER - GIRDERS G2



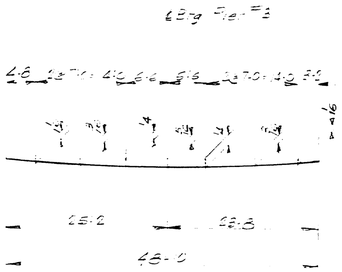
CAMBER - GIRDERS G3



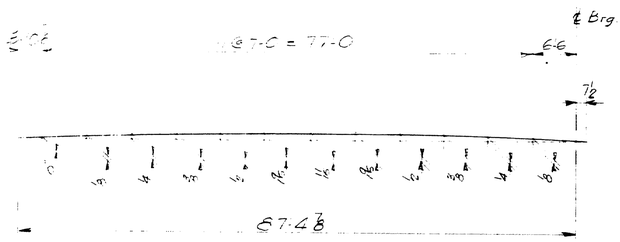
CAMBER - GIRDERS G4



CAMBER - GIRDERS G5



CAMBER - GIRDERS G6



CAMBER - GIRDERS G7

NOTES

PROFILE & CAMBER DIAGRAMS

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEYS BRIDGE
PORTLAND, MAINE

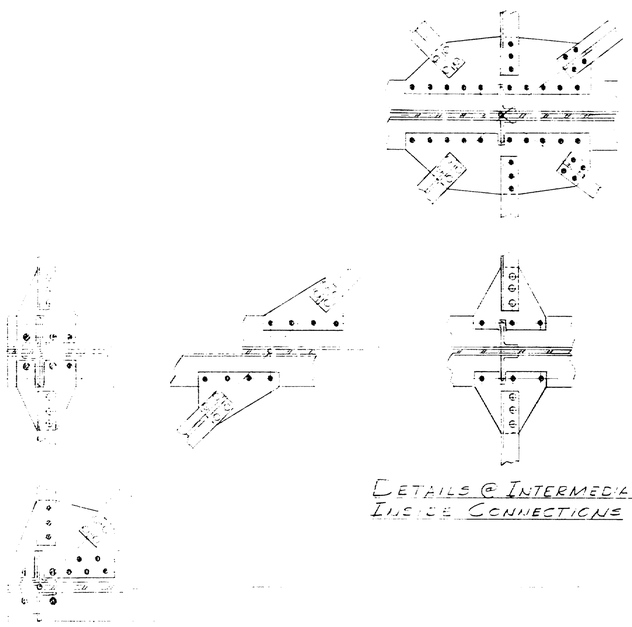
CUSTOMER D. J. FLYNN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.

DRAWN	5-22-58	J.R.P.
REVISION		
REVISION		
REVISION		

ORDER NO. VERBAL
DWG. NO. B-161-D1

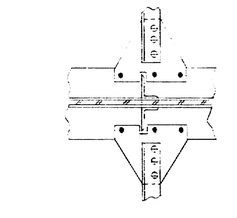
76-168

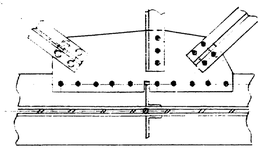
0 1 2 3 4 5 INCHES



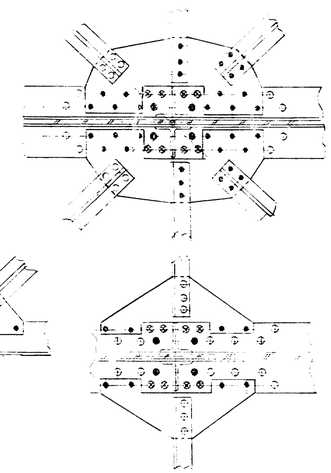
DETAILS @ INTERMEDIATE INSIDE CONNECTIONS

DETAILS @ HEEL JOINTS





DETAILS @ INTERMEDIATE OUTSIDE CONNECTIONS



DETAILS @ PIERS

All lateral bracing ST 5 LF 0.5
All gussets ⅜"

NOTES:

NOTE
Spacing of holes in gussets not shown on this drawing because it varies greatly due to the different rivet pitches used in riveting cover plates. For this information refer to girder details.

DRAWN	7-11-58	J.P.F.
REVISION	10-7-58	J.P.F.
REVISION		
REVISION		

FINAL DRAWING-TYP. DETAILS

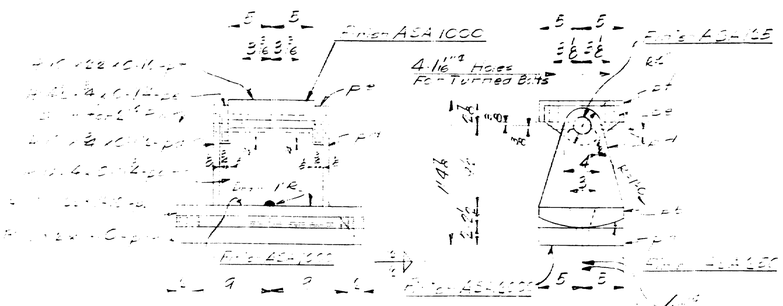
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEY'S BRIDGE
PORTLAND, MAINE

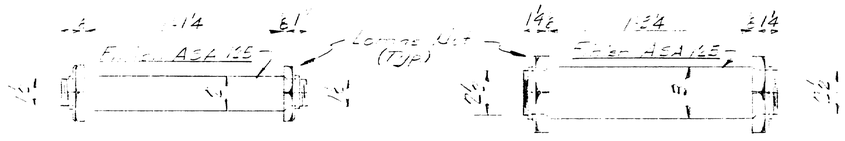
CUSTOMER W. H. HINMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.

ORDER NO. VERBAL | DWG. NO. B-151-D2

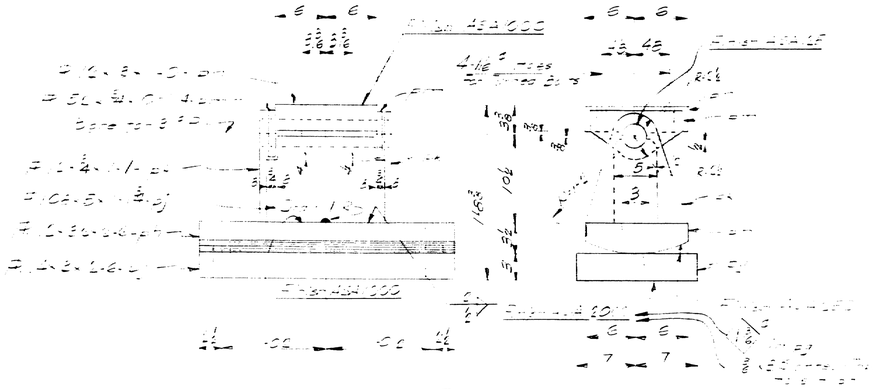
76-169



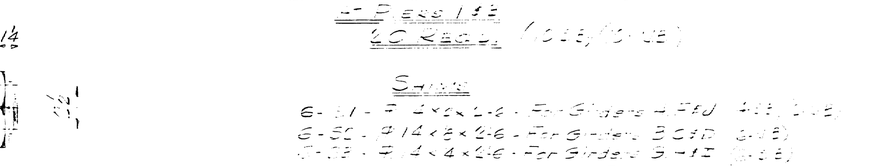
Expansion Pedestal - EP1
20 Req'd. (10-SB)(10-NB)



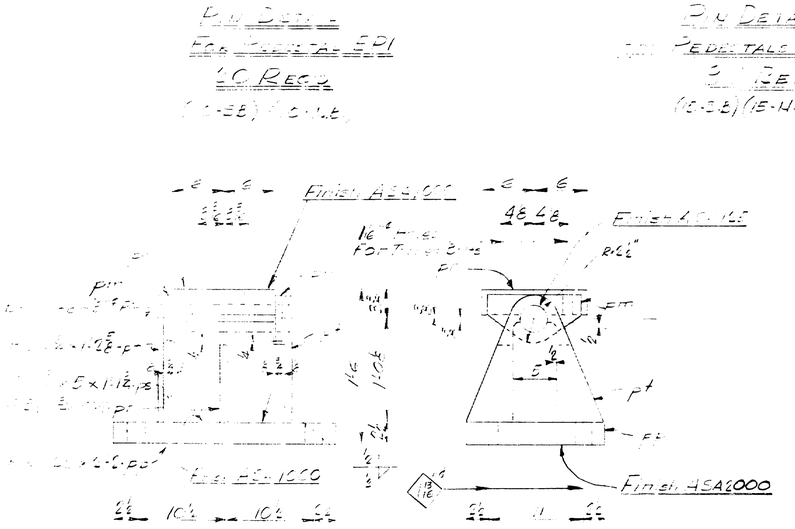
Pin Detail
For Pedestals EP1
20 Req'd.
(10-SB)(10-NB)



Expansion Pedestal - EP2
40 Pedestals
80 Req'd.
(40-SB)(40-NB)

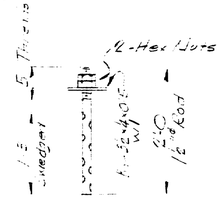


Pin Detail
For Pedestals EP2 & FP1
60 Req'd.
(30-SB)(30-NB)



Fixed Pedestal - FP1
At Pier 2
10 Req'd. (5-SB)(5-NB)

Shims
3-J4 - PL 16"×½"×2'-2" - For Girders A, F & J (2-SB)(1-NB)
3-J5 - PL 16"×½"×2'-2" - For Girders B, C & D (3-NB)
3-J6 - PL 16"×¼"×2'-2" - For Girder G, H & I (3-SB)
These Shims are to be Fabricated to the same detail as pp.
All shims to have Finish ASA 2000



Anchor Bolts AB1
At Abutments
40 Req'd.
(20-SB)(20-NB)

Anchor Bolts AB2
At Piers 1 & 3
40 Req'd.
(20-SB)(20-NB)

Anchor Bolts AB3
At Pier 2
4 Req'd.
(2-SB)(2-NB)

Notes:
1.) Plates to be straight & true after welding.
2.) Scale weigh assemblies.
3.) Make metal template for drilling 1 1/16" holes. Fabricating shop to be given this template so it may be used for drilling girders.

SB = Southbound Bridge.
NB = Northbound Bridge.

SHIP MARK	NO	MARK	SHAPE	LENGTH	WT	REMARKS
EP1	10		5" Pedestal	1'-0"		Fin. A ASA 125
EP2	20		5" Pedestal	2'-6"		10 Fin. A ASA 125
FP1	5		5" Pedestal	2'-6"		10 Fin. A ASA 1000
AB1	40		1 1/2" Rod	6'-6"		
AB2	40		1 1/2" Rod	6'-3"		
AB3	40		1 1/2" Rod	6'-0"		
	20	Shop	5" Pedestal			
	20	L	L3½×3½×½	2'-5"	71#	Comp. Reinforcement
S1	2		PL ½×6	1'-3"	4#	
S2	2		PL ½×6	1'-4"	4#	
S3	2		PL ½×6	1'-5"	4#	
S4	2		PL ½×6	1'-6"	4#	
S5	2		PL ½×6	1'-7"	5#	
S6	2		PL ½×6	1'-8"	5#	
	12	J1	PL ½×6	1'-9"	20#	
	12	J2	PL ½×6	1'-10"	11#	
	12	J3	PL ½×6	1'-11"	11#	
	12	J4	PL ½×6	2'-0"	12#	
	12	J5	PL ½×6	2'-1"	12#	
	12	J6	PL ½×6	2'-2"	12#	
	12	J7	PL ½×6	2'-3"	13#	
	12	J8	PL ½×6	2'-4"	13#	
	12	J9	PL ½×6	2'-5"	14#	
	12	J10	PL ½×6	2'-6"	14#	
	12	J11	PL ½×6	2'-7"	15#	
	12	J12	PL ½×6	2'-8"	15#	
	12	J13	PL ½×6	2'-9"	16#	
	12	J14	PL ½×6	2'-10"	16#	
	12	J15	PL ½×6	2'-11"	17#	
	12	J16	PL ½×6	3'-0"	17#	
	12	J17	PL ½×6	3'-1"	18#	
	12	J18	PL ½×6	3'-2"	18#	
	12	J19	PL ½×6	3'-3"	19#	
	12	J20	PL ½×6	3'-4"	19#	
	12	J21	PL ½×6	3'-5"	20#	
	12	J22	PL ½×6	3'-6"	20#	
	12	J23	PL ½×6	3'-7"	21#	
	12	J24	PL ½×6	3'-8"	21#	
	12	J25	PL ½×6	3'-9"	22#	
	12	J26	PL ½×6	3'-10"	22#	
	12	J27	PL ½×6	3'-11"	23#	
	12	J28	PL ½×6	4'-0"	23#	
	12	J29	PL ½×6	4'-1"	24#	
	12	J30	PL ½×6	4'-2"	24#	
	12	J31	PL ½×6	4'-3"	25#	
	12	J32	PL ½×6	4'-4"	25#	
	12	J33	PL ½×6	4'-5"	26#	
	12	J34	PL ½×6	4'-6"	26#	
	12	J35	PL ½×6	4'-7"	27#	
	12	J36	PL ½×6	4'-8"	27#	
	12	J37	PL ½×6	4'-9"	28#	
	12	J38	PL ½×6	4'-10"	28#	
	12	J39	PL ½×6	4'-11"	29#	
	12	J40	PL ½×6	5'-0"	29#	
	12	J41	PL ½×6	5'-1"	30#	
	12	J42	PL ½×6	5'-2"	30#	
	12	J43	PL ½×6	5'-3"	31#	
	12	J44	PL ½×6	5'-4"	31#	
	12	J45	PL ½×6	5'-5"	32#	
	12	J46	PL ½×6	5'-6"	32#	
	12	J47	PL ½×6	5'-7"	33#	
	12	J48	PL ½×6	5'-8"	33#	
	12	J49	PL ½×6	5'-9"	34#	
	12	J50	PL ½×6	5'-10"	34#	
	12	J51	PL ½×6	5'-11"	35#	
	12	J52	PL ½×6	6'-0"	35#	
	12	J53	PL ½×6	6'-1"	36#	
	12	J54	PL ½×6	6'-2"	36#	
	12	J55	PL ½×6	6'-3"	37#	
	12	J56	PL ½×6	6'-4"	37#	
	12	J57	PL ½×6	6'-5"	38#	
	12	J58	PL ½×6	6'-6"	38#	
	12	J59	PL ½×6	6'-7"	39#	
	12	J60	PL ½×6	6'-8"	39#	
	12	J61	PL ½×6	6'-9"	40#	
	12	J62	PL ½×6	6'-10"	40#	
	12	J63	PL ½×6	6'-11"	41#	
	12	J64	PL ½×6	7'-0"	41#	
	12	J65	PL ½×6	7'-1"	42#	
	12	J66	PL ½×6	7'-2"	42#	
	12	J67	PL ½×6	7'-3"	43#	
	12	J68	PL ½×6	7'-4"	43#	
	12	J69	PL ½×6	7'-5"	44#	
	12	J70	PL ½×6	7'-6"	44#	
	12	J71	PL ½×6	7'-7"	45#	
	12	J72	PL ½×6	7'-8"	45#	
	12	J73	PL ½×6	7'-9"	46#	
	12	J74	PL ½×6	7'-10"	46#	
	12	J75	PL ½×6	7'-11"	47#	
	12	J76	PL ½×6	8'-0"	47#	
	12	J77	PL ½×6	8'-1"	48#	
	12	J78	PL ½×6	8'-2"	48#	
	12	J79	PL ½×6	8'-3"	49#	
	12	J80	PL ½×6	8'-4"	49#	
	12	J81	PL ½×6	8'-5"	50#	
	12	J82	PL ½×6	8'-6"	50#	
	12	J83	PL ½×6	8'-7"	51#	
	12	J84	PL ½×6	8'-8"	51#	
	12	J85	PL ½×6	8'-9"	52#	
	12	J86	PL ½×6	8'-10"	52#	
	12	J87	PL ½×6	8'-11"	53#	
	12	J88	PL ½×6	9'-0"	53#	
	12	J89	PL ½×6	9'-1"	54#	
	12	J90	PL ½×6	9'-2"	54#	
	12	J91	PL ½×6	9'-3"	55#	
	12	J92	PL ½×6	9'-4"	55#	
	12	J93	PL ½×6	9'-5"	56#	
	12	J94	PL ½×6	9'-6"	56#	
	12	J95	PL ½×6	9'-7"	57#	
	12	J96	PL ½×6	9'-8"	57#	
	12	J97	PL ½×6	9'-9"	58#	
	12	J98	PL ½×6	9'-10"	58#	
	12	J99	PL ½×6	9'-11"	59#	
	12	J100	PL ½×6	10'-0"	59#	

Erection Marks

SHOP CONNECTIONS: A.S.T.M. A 325 HIGH STRENGTH BOLTS
FIELD CONNECTIONS: A.S.T.M. A 325 HIGH STRENGTH BOLTS
HOLES: 1 1/16" DIA.
PAINT: SHOP COAT - 1 COAT RED OXIDE
FIELD COAT - 1 COAT RED OXIDE

Apr. 1 '58 SB

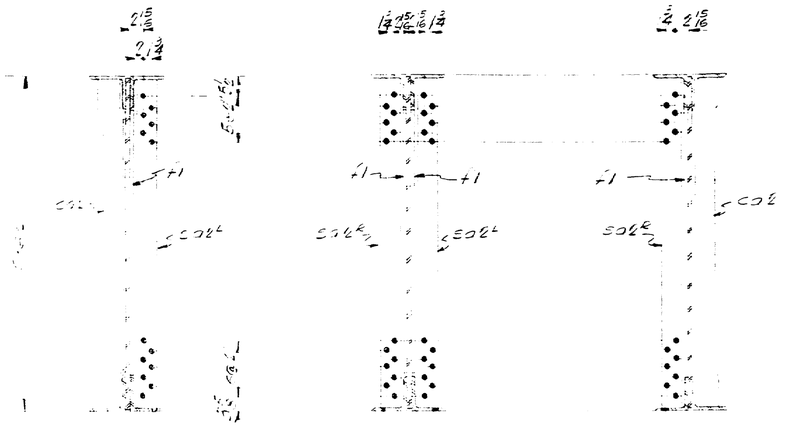
PEDESTAL DETAILS
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine
TUKEY'S BRIDGE
PORTLAND, MAINE

DRAWN	5-12-58	J.P.F.
REVISION		
REVISION		
REVISION		

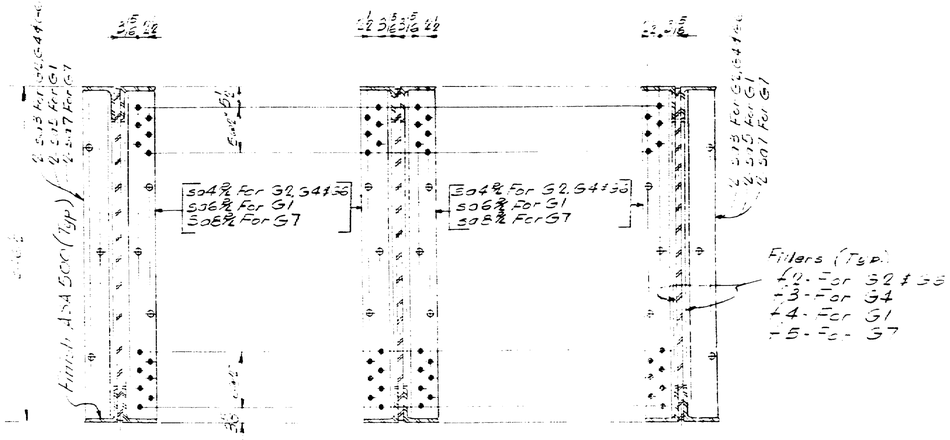
CUSTOMER U.S. Highway Dept.
DESIGNER State of Maine Bridge Div.
ORDER NO. 1 REQ'D. | DWG. NO. 3-54-51

76-170

0 1 2 3 4 5 INCHES

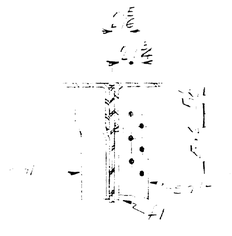


SECTION A1-A1 SECTION A2-A2 SECTION A3-A3

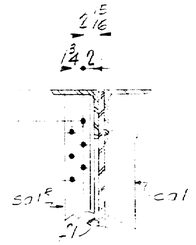


SECTION C1-C1 SECTION C2-C2 SECTION C3-C3

Cover Plates not shown
Stiffeners -5-6x⅝ - Fills -Bar 3x⅝



SECTION B1-B1

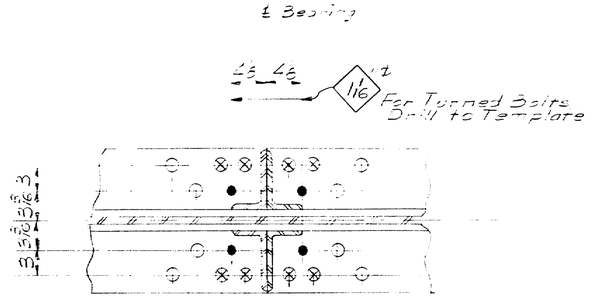


SECTION B2-B2

NOTE:
Cover Plates not shown.
Stiffeners 4-5x3½-⅝ - Fills-Bar 3½x⅝

GENERAL NOTES

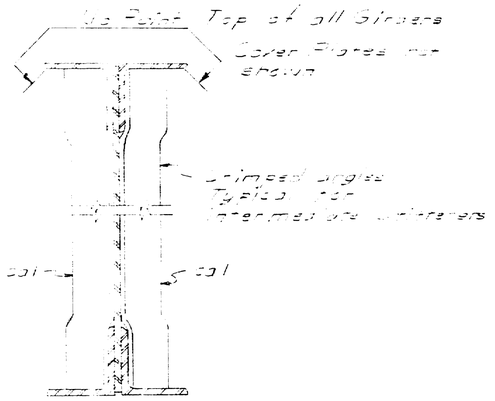
1.) In steel thicker than ¾" holes shall be sub-punched or sub-drilled ⅛" smaller and after assembling reamed to 1/16" larger or drilled from the solid to 1/16" larger than the nominal diameter of the rivets.
2.) Open holes are for H.-Tensile Bolts. they are to be free from burrs and there shall be no point on any surface within 3" of such open holes.
3.) Holes in field splices of continuous girders to be sub-punched (or sub-drilled) and reamed while assembled in the shop and connecting parts to be match marked & bolted for shipment.
4.) Bearing Stiffeners to have ends milled to secure an even bearing against flange angles.



DETAIL AT PIER BEARINGS

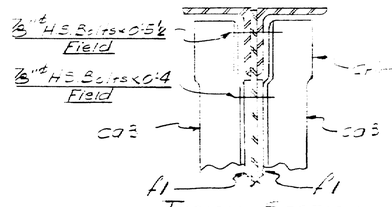
For location of other open holes @ these points see Girder Details

Cover Plates not shown



TYPICAL SECTION
5-Stiffeners-5-32x16

NOTES.
SHOP RIVETS: ⅞" ø Rivets
FIELD BOLTS: ⅞" ø H.S. Bolts
FABRICATION: AASHO Code per State of Maine Specs.



TYPICAL SECTION
Stiffener @ Splice
Stiffeners 4-5x32x16
Fills-Bar 3½x32

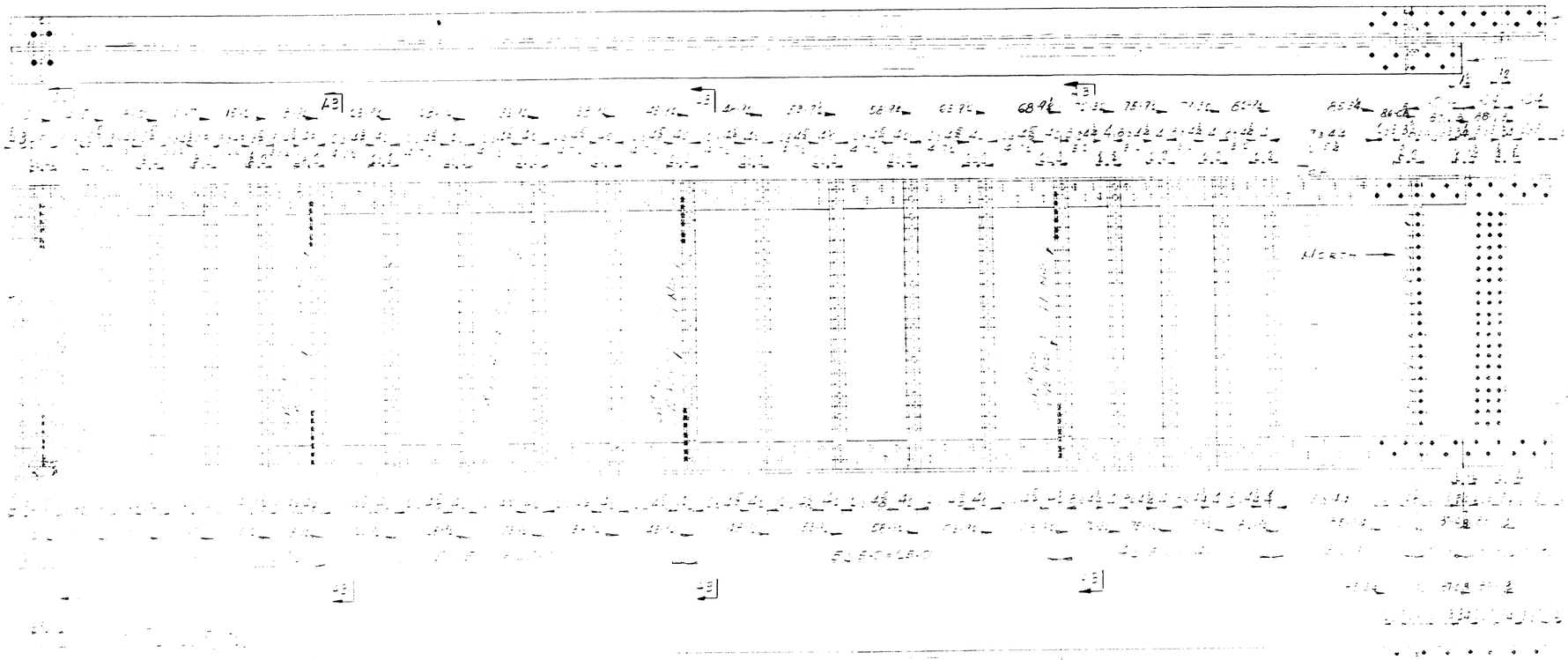
TYPICAL SECTIONS & DETAILS
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine
TUKEYS BRIDGE
PORTLAND, MAINE
CUSTOMER W. H. HUMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.
ORDER NO. VERBAL DWG. NO. B-164-52

DRAWN	6-10-58	J.P.F.
REVISION		
REVISION		
REVISION		

APP. 9/17/58

0 1 2 3 4 5 INCHES

76-171



NOTES

Notes:
For complete diagram see drawing 6-164-S1
For Sections & Details not shown see drawing 6-164-S2
For sizes of material see Bill of Material on 6-164-S3

DRAWN	6-7-58	J.P.L.
REVISION		
REVISION		
REVISION		

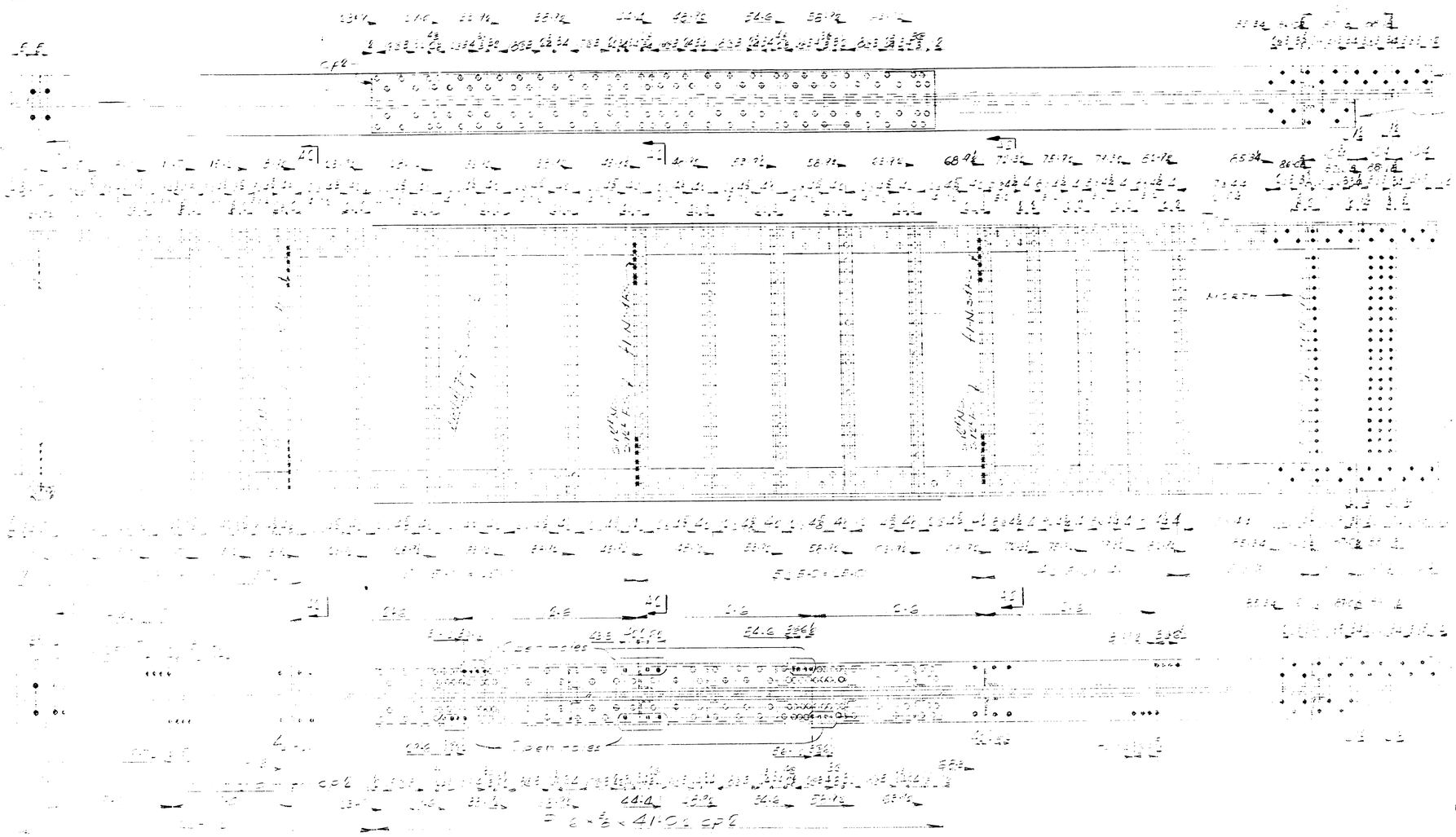
Bancroft & Martin Rollins Mills Company
South Portland 7, Maine

TUKEY'S BRIDGE
PORTLAND, MAINE

CUSTOMER [illegible] ENG.
DESIGNER [illegible] BRIDGE DIV

ORDER NO. VERBAL | DWG. NO. 3-164-S1

76-172



NOTES:

Bill of Reinforcement - Sidewalk

Notes:
For camber diagram see drawing 8-164-D1
For Sections & Details not shown see drawing 8-164-S4
For sizes of material see Bill of Material 8-164-S3

DRAWN	E.J.F.B.	J.P.P.
REVISION		
REVISION		
REVISION		

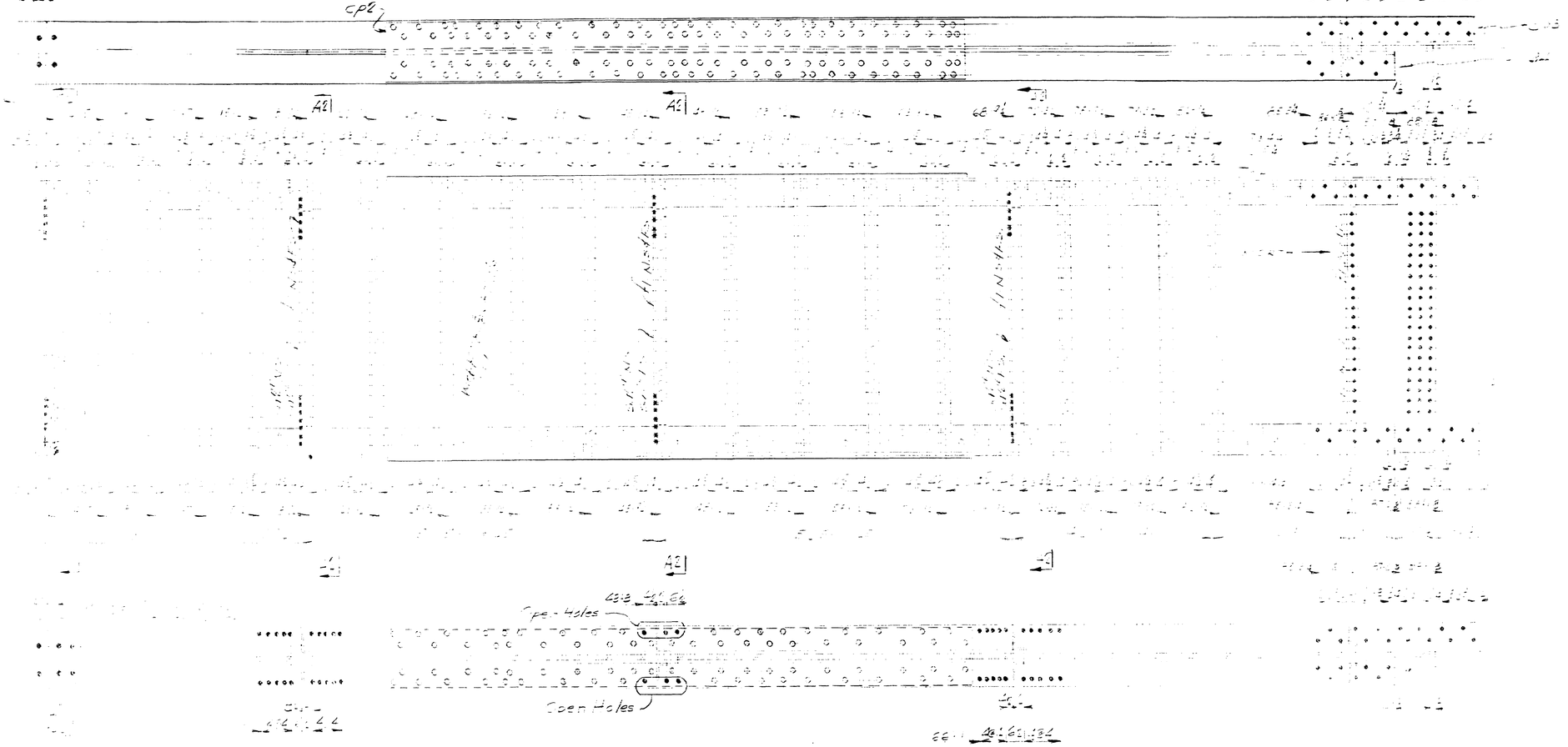
Bancroft & Martin Rollins Wilson Company
South Portland 7, Maine

TUKEY'S BRIDGE
PORTLAND MAINE

CUSTOMER [illegible]
DESIGNER [illegible] BRIDGE DIV

ORDER NO. VERBAL | DWG. NO. 8-164-S2

76-173



NOTES.

Bancroft & Martin Rolling Mill Company
South Portland 7, Maine

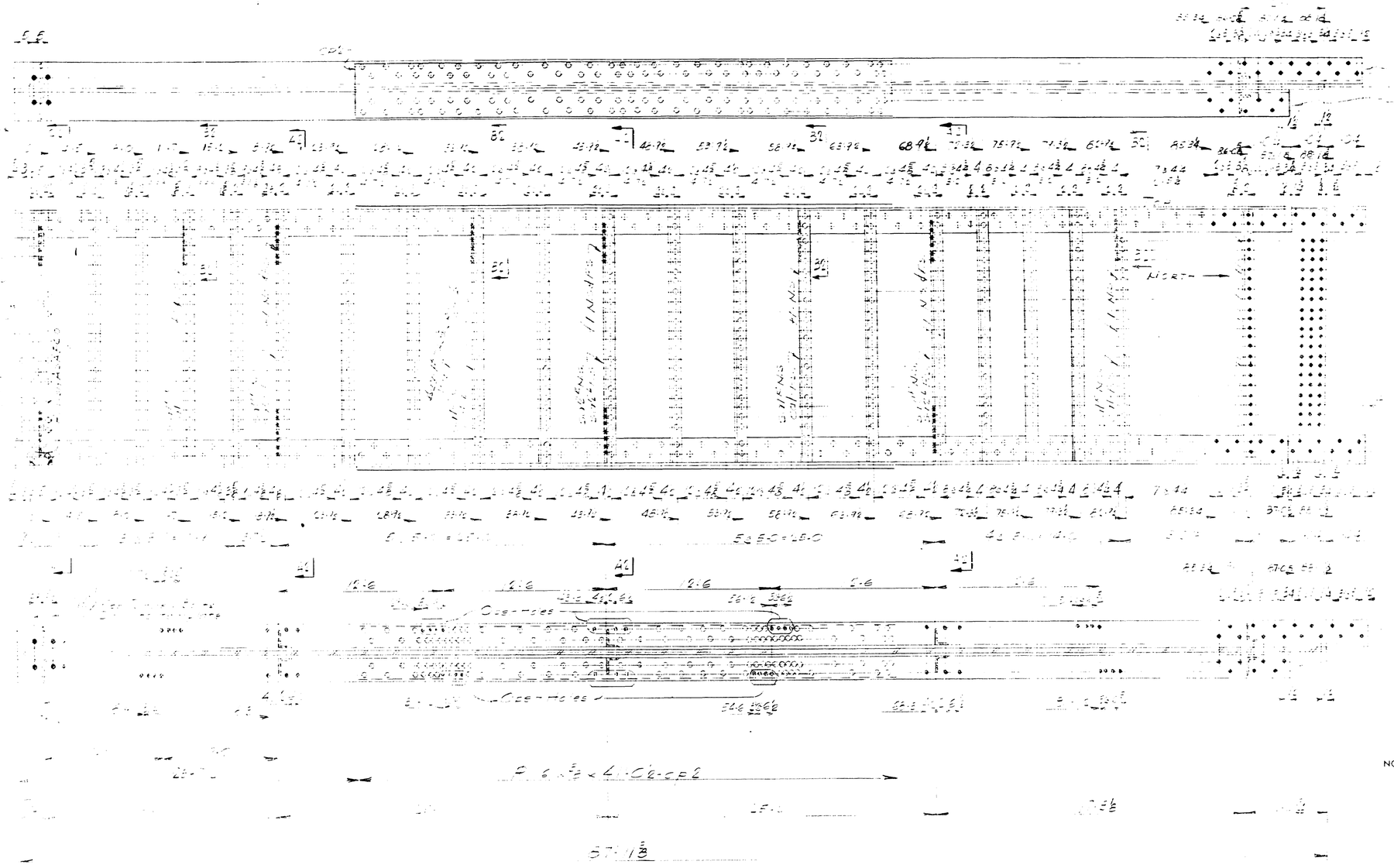
TUKEY'S BRIDGE
PORTLAND, MAINE

CUSTOMER [illegible]
DESIGNER [illegible]

ORDER NO. [illegible] DWG. NO. 8-164-S

DRAWN	[illegible]	-58	JPP
REVISION			
REVISION			
REVISION			

76-174



Plates 5/16 - 1 Req'd

Notes:
For camber diagram see drawing 8-164-D1
For Sections & Details not shown see drawing 8-164-S2
For sizes of material see Bill of Materials 8-164-S3

NOTES.
Rivets
H.S. Bolts
As Noted (See General Notes)
State of Maine
(See General Notes)
See DWG. 8-164-S2

DRAWN	6-58	J.P.E.
REVISION		
REVISION		
REVISION		

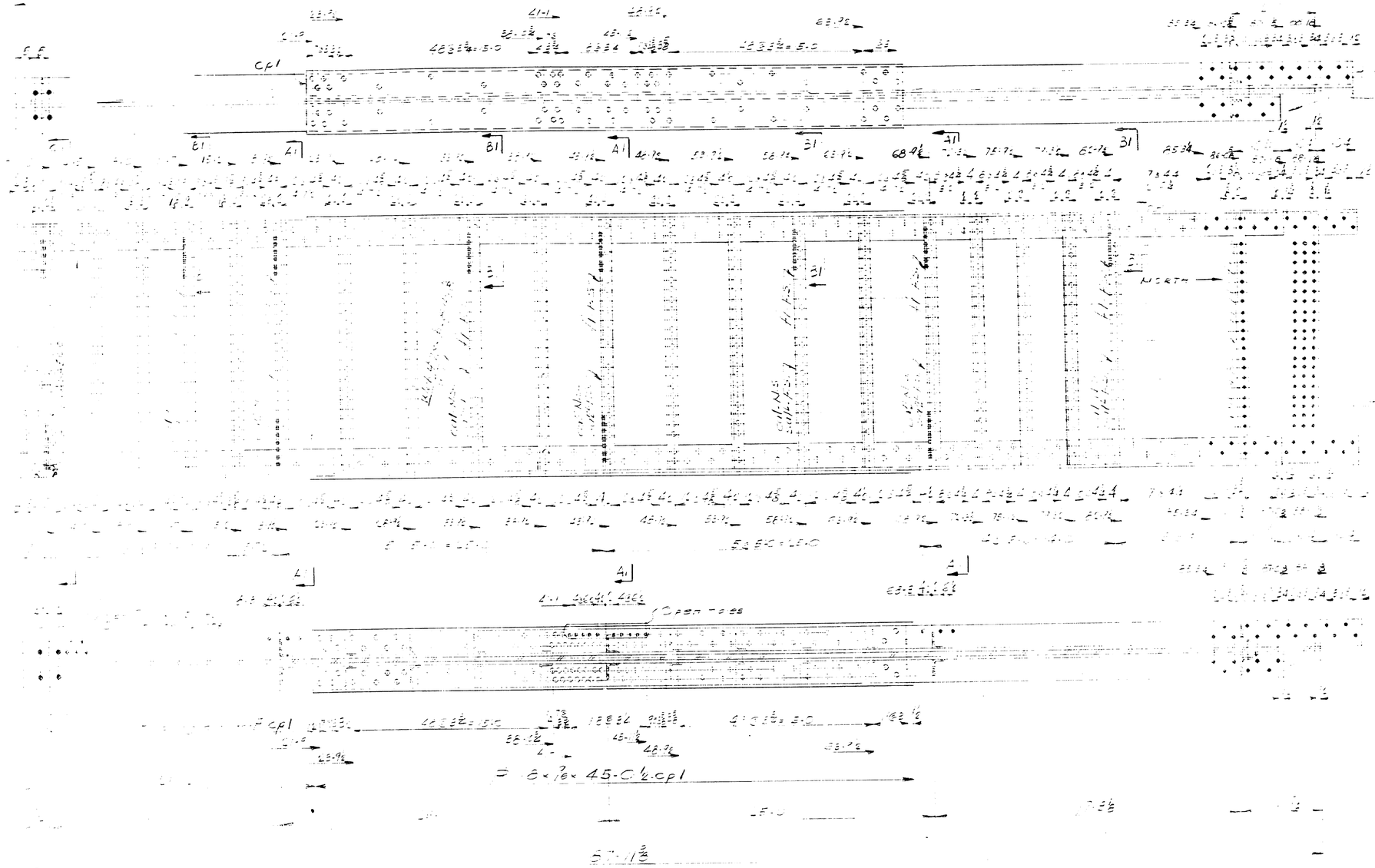
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

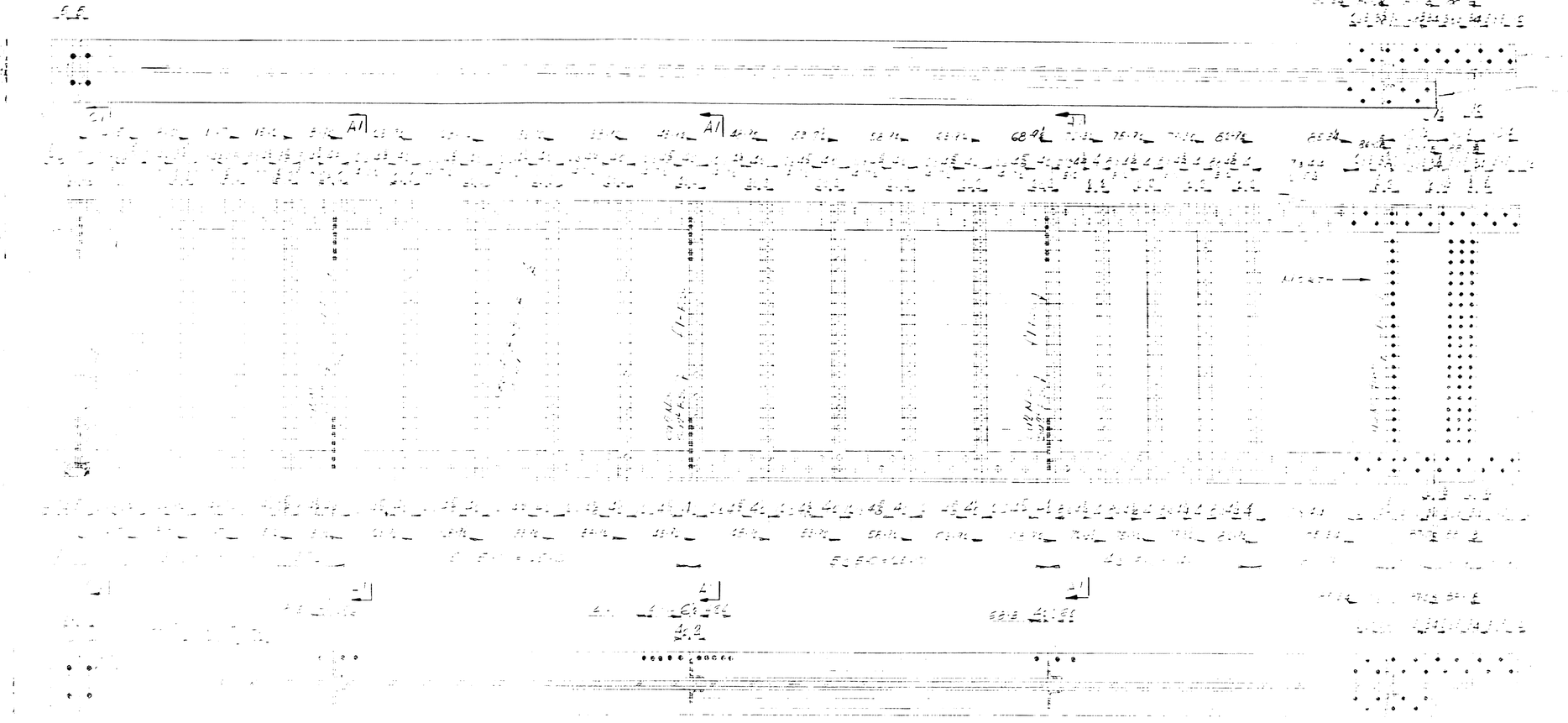
TUKEYS BRIDGE
PORTLAND, MAINE

CUSTOMER J. H. TINMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.

ORDER NO. VERBAL | DWG. NO. 8-164-S1

76-175


NORTH
Open Floor
Open Floor
Open Floor



25-0

25-0

7-3½

NOTES:

1 - 1" Rivets
2 - 1" H.S. Bolts
[illegible]
[illegible]
[illegible]

For camber diagram see drawing 8-164-S1
For Sections & Details not shown see drawing 8-164-S2
For sizes of material see Bill of Material on 8-164-S3

DRAWN	6-1-58	J.P.P.
REVISION		
REVISION		
REVISION		

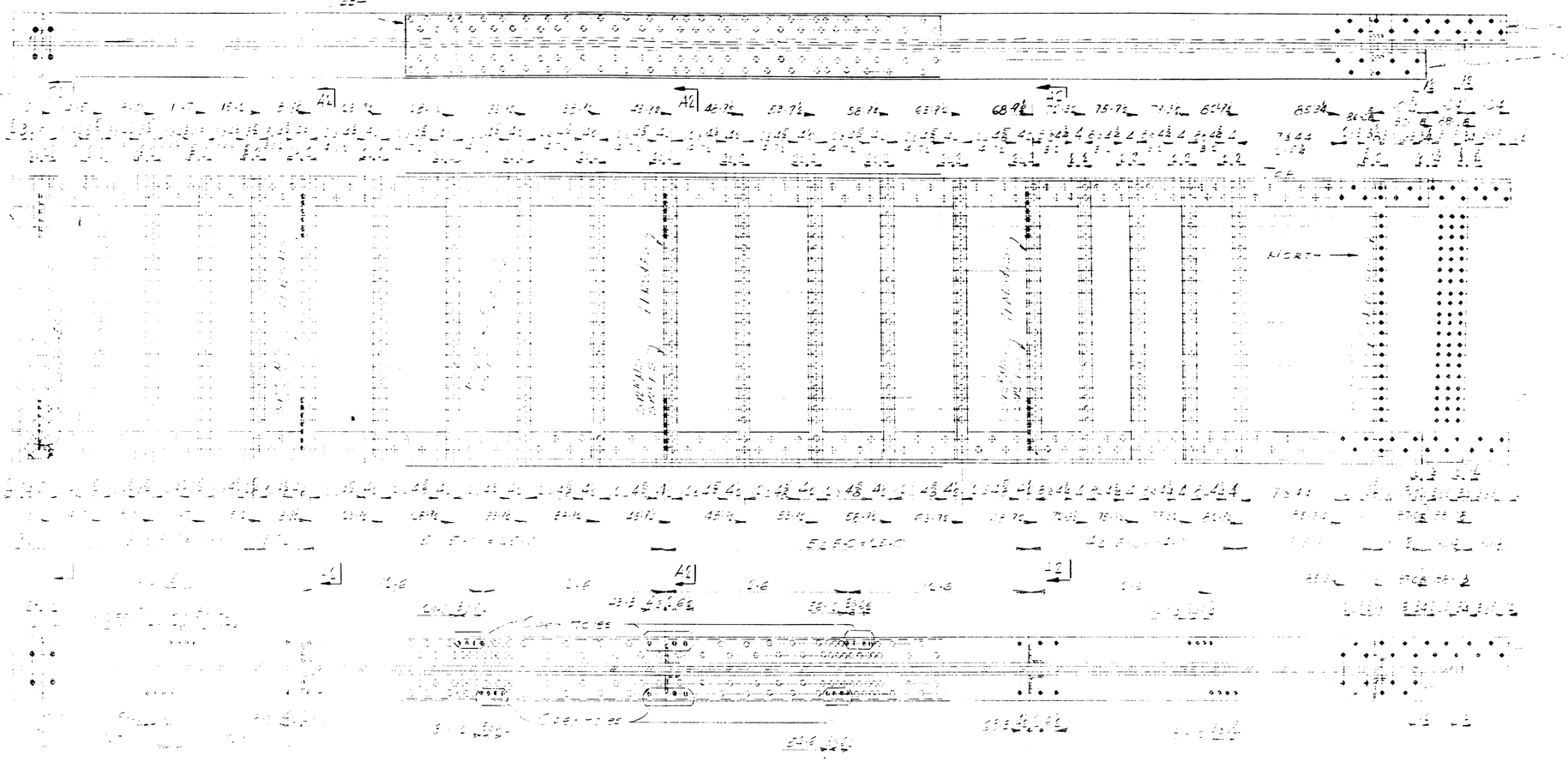
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUNEY'S BRIDGE
PORTLAND, MAINE

CUSTOMER [illegible]
DESIGNER [illegible] BRIDGE DIV.

ORDER NO. [illegible] DWG. NO. 8-164-S3

76-177



NOTES:
For camber diagram see drawing 8-164-D1
For Sections & Details not shown see drawing 8-164-S4
For sizes of material see Bill of Material 8-164-S5

NOTES:
Shop Connections: 7/8" Rivets
Field Connections: 7/8" H.S. Bolts
Holes: 7/8" ø Punched (See Details on Plans)
Paint: Per State of Maine Specs. (See General Notes)

For General Notes see DWG. 8-164-S2

Bancroft & Martin Rollins Mills Company
South Portland 7, Maine

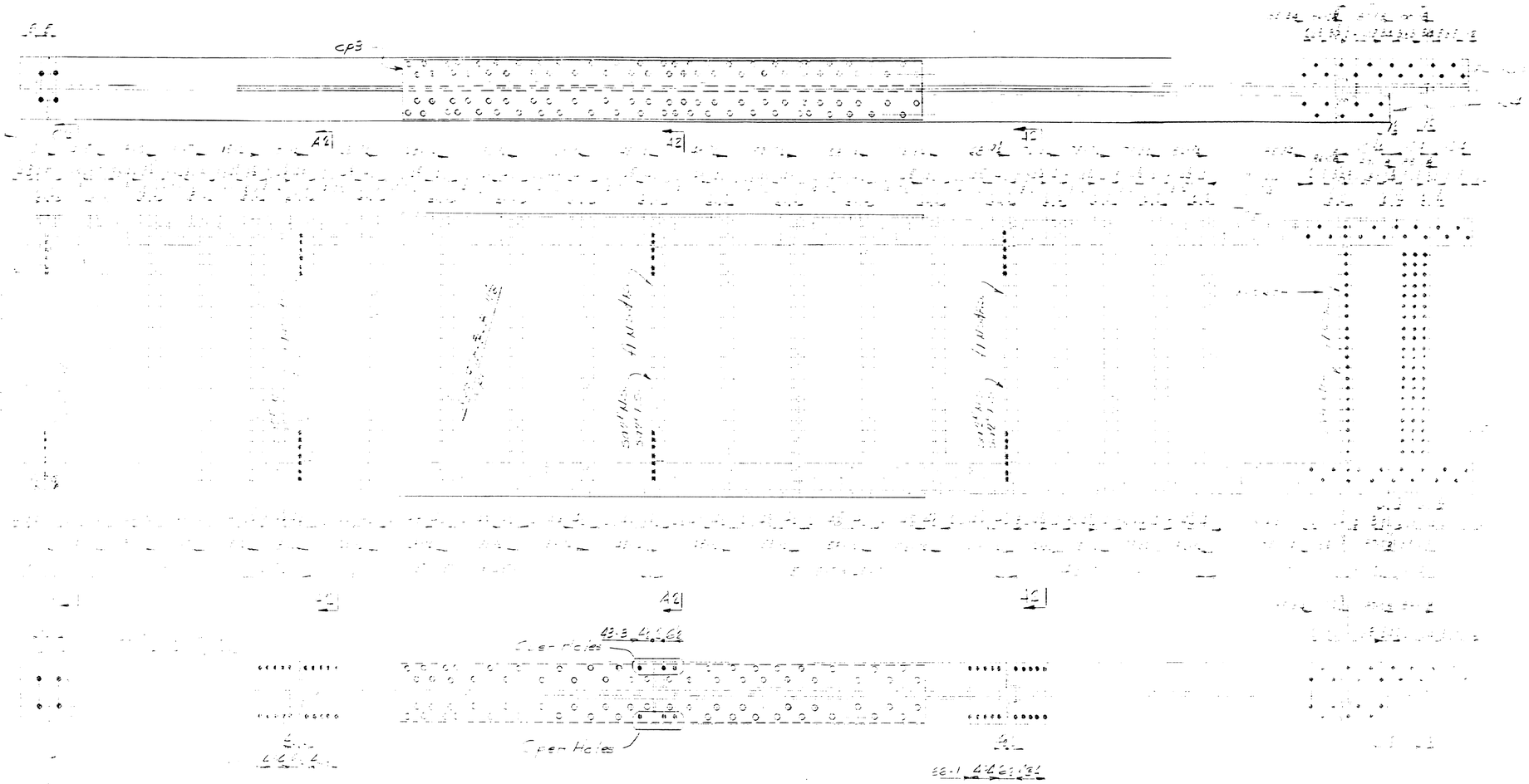
TUKEYS BRIDGE
PORTLAND, MAINE

DRAWN	6-13-58	J.P.F.
REVISION		
REVISION		
REVISION		

CUSTOMER N. H. TURNER ENG.
DESIGNER MAINE STATE H.C. BRIDGE DN

ORDER NO. VERBAL | DWG. NO. 8-164-S7

76-178



NOTES:

Bridge Data

Bridge Design Specifications

Design Loading

Fabrication

Erection

Paint

Welding

Bolts

Shop Drawings

Camber

Cover Plates

Shear Connectors

Deck Placement

Deck Reinforcing

Miscellaneous

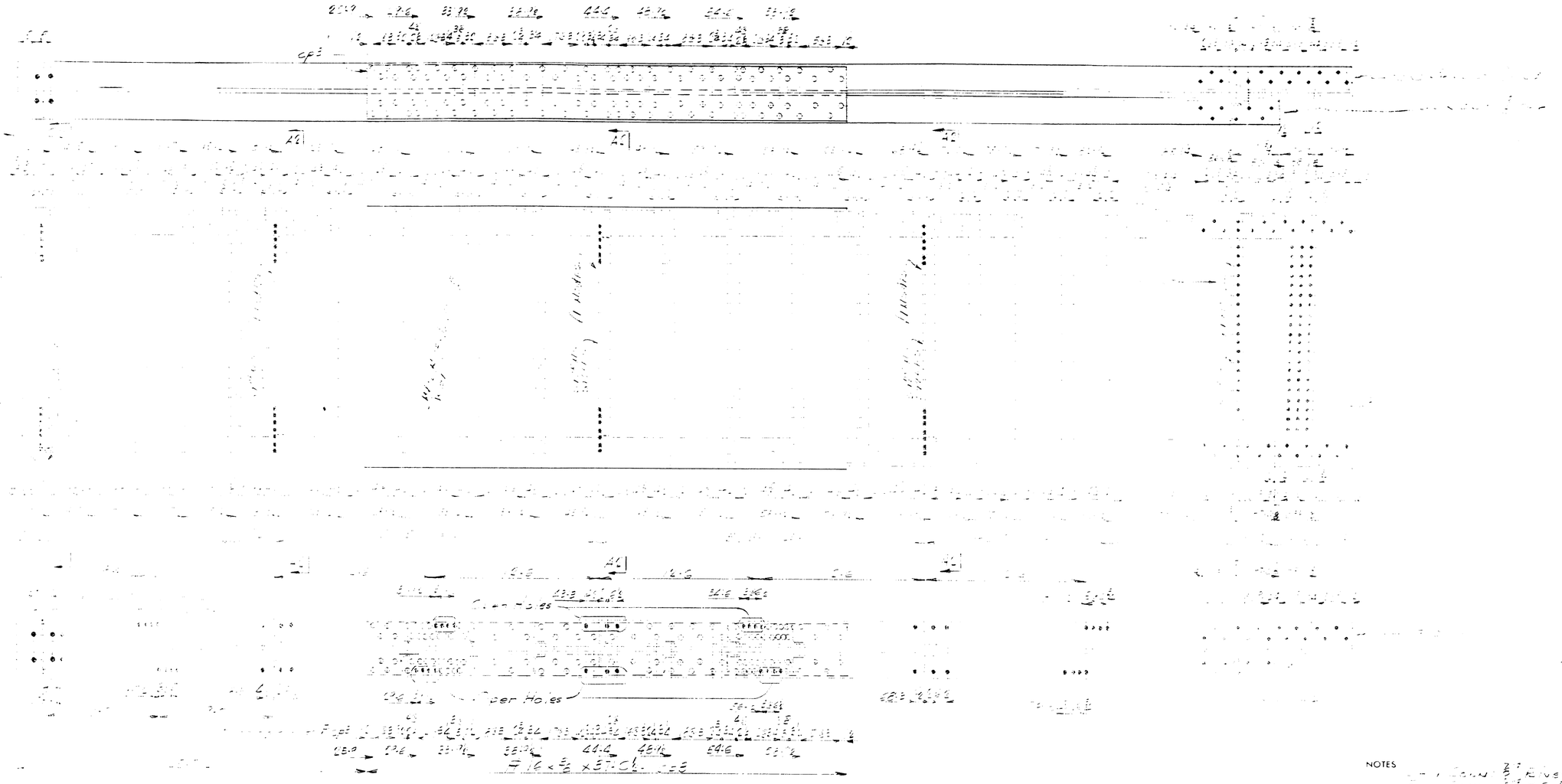
Refer to Sheet S1-1 REQ'D.

For additional information not given see Sheet 8-164-S1

For [illegible] see Sheet 8-164-S1

For [illegible] see Sheet 8-164-S1

For [illegible]



NOTES

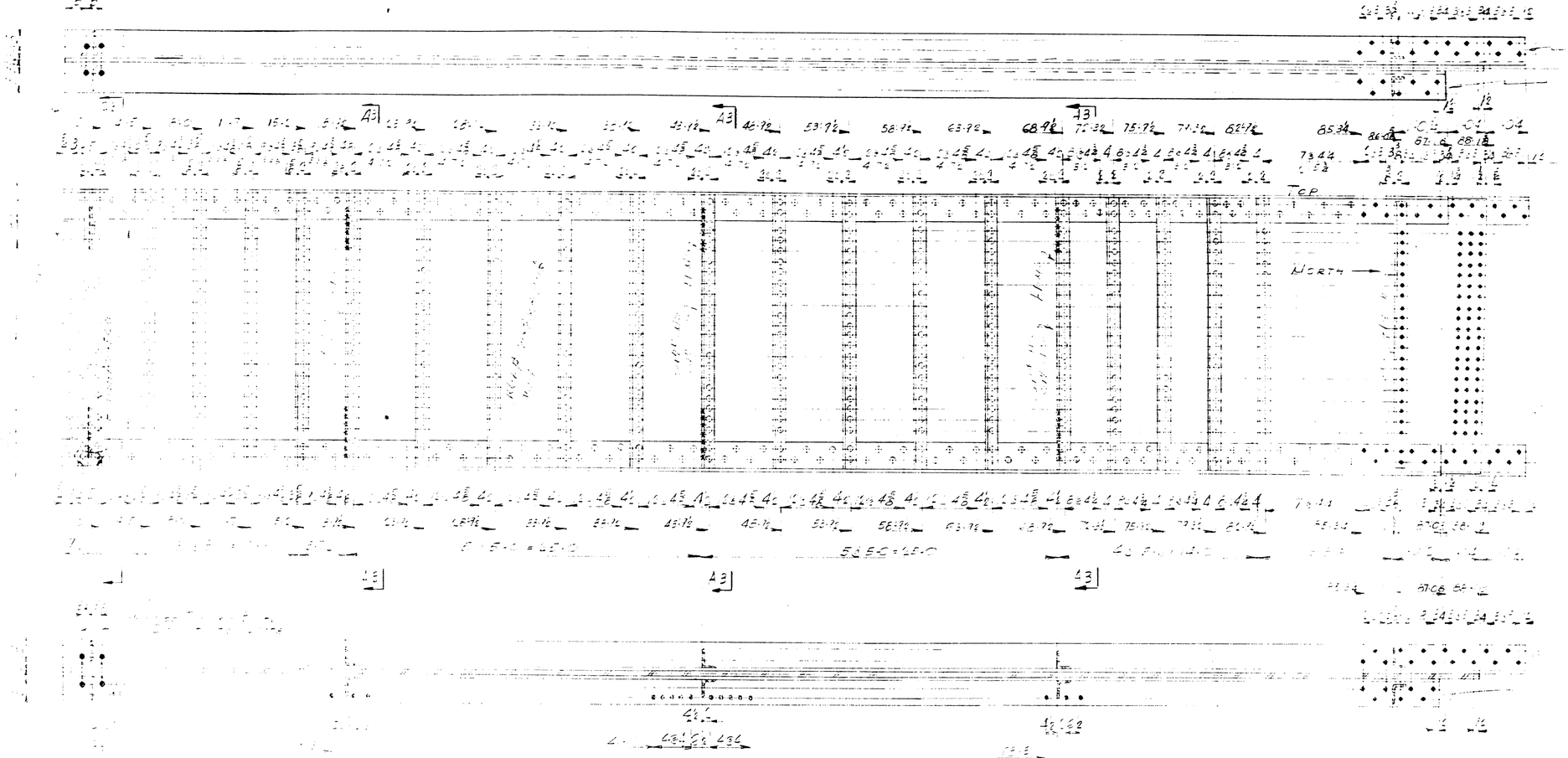
Bancroft & Martin Rollins Mills Company
South Portland 7, Maine

TURKEY POINT
PORTLAND MAINE

CUSTOMER
DES.GNER
ORDER NO.
DWG. NO. S-164-S11

DRAWN			J.F.D.
REVISION			
REVISION			
REVISION			

76-180



FINISH GRADE

NOTES:
For camber diagram see drawing 8-164-D1
For Section & Details not shown see drawing 8-164-S2
For sizes of material see Bill of Material 8-164-S3

NOTES:
SHOP CONN.: 7/8" Rivets
FIELD CONN.: A325 H.S. Bolts
HOLES: 15/16" ϕ As Noted (See General Notes)
PAINT: Per State of Maine Specs. (See General Notes)

For General Notes See DWG. 8-164-S2

Bancroft & Martin Rollins Mills Company
South Portland 7, Maine

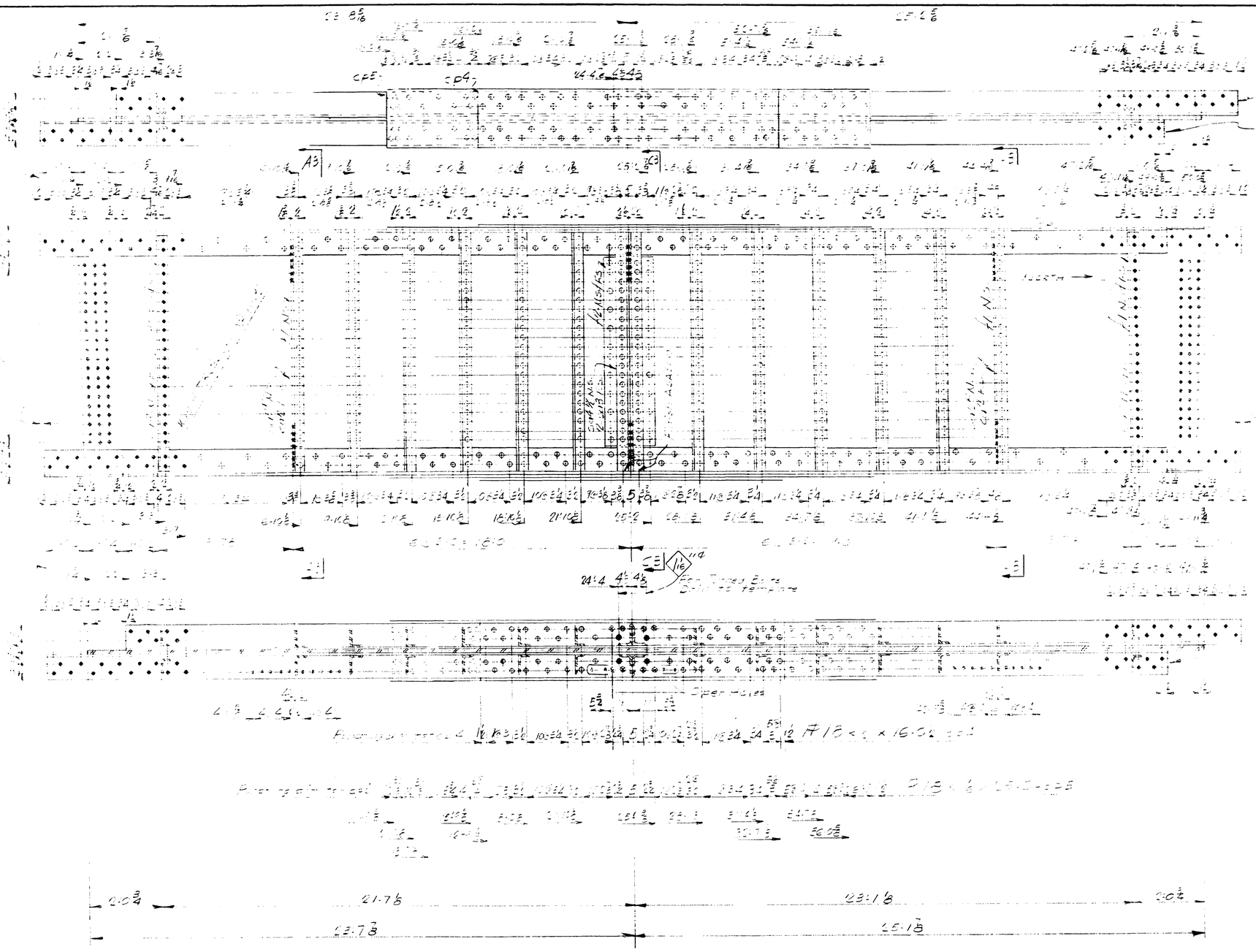
TUKEYS BRIDGE
PORTLAND, MAINE

DRAWN	6-5-58	J.P.P.
REVISION		
REVISION		
REVISION		

CUSTOMER U. H. HINMAN INC.
DESIGNER STATE OF MAINE H.C. BRIDGE ON

ORDER NO. VERBAL | DWG. NO. 8-164-S1

76-181



NOTES:

GIRDER G2 4 - 1 REQ'D.

NOTES
For camber diagram see drawing 8-164-D1
For SECTIONS & DETAILS not shown see drawing 8-164-S2
For sizes of material see Bill of Material 8-164-S3

DRAWN		
REVISION		
REVISION		
REVISION		

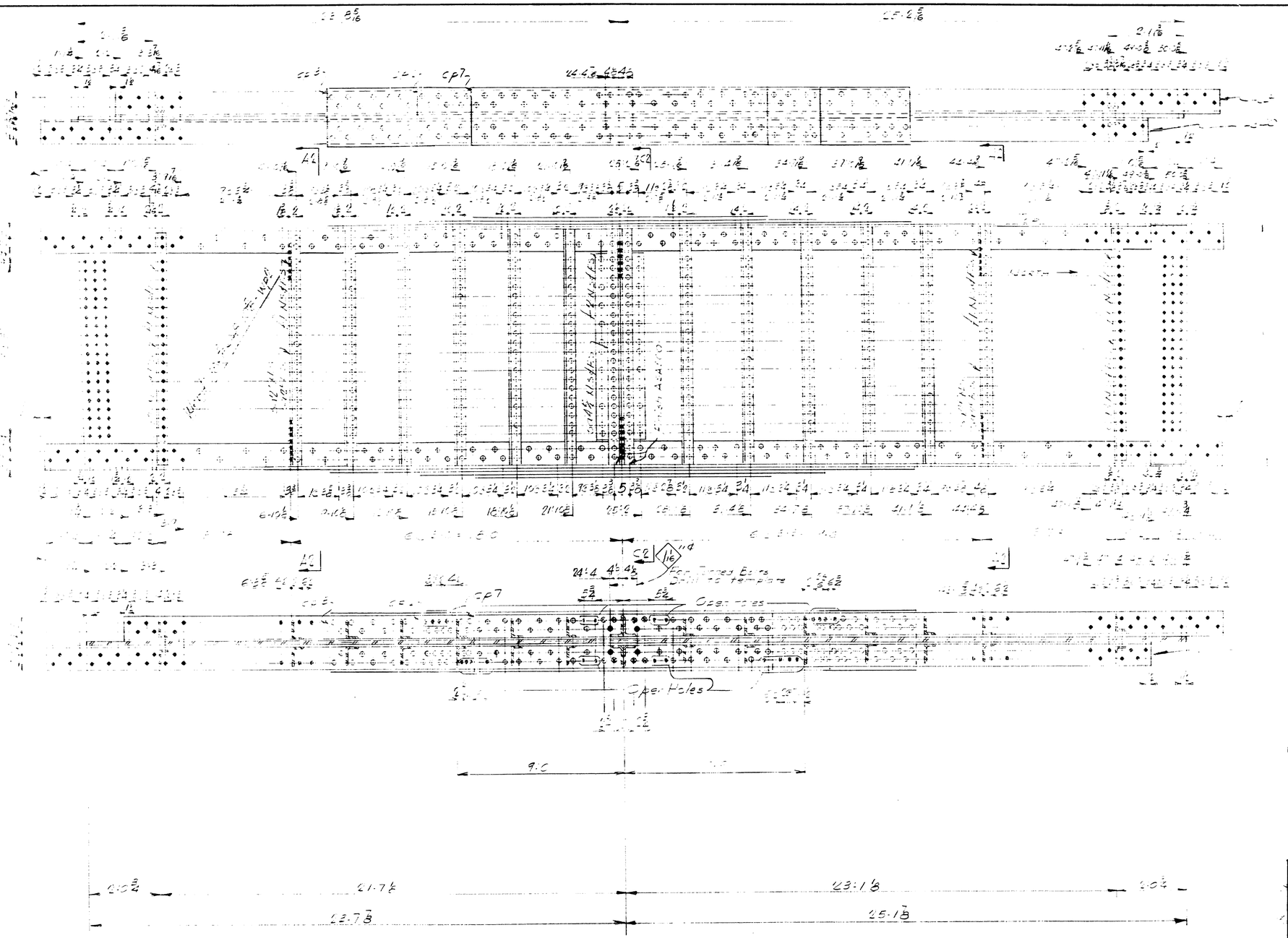
Bancroft & Martin Rollins Wells & Company
South Portland 7, Maine

TUKEY'S BRIDGE
PORTLAND MAINE

CUSTOMER
DESIGNER

ORDER NO. | DWG. NO. 8-164-S 13

76-182



NOTES:

GIRDER G2S - 1 REQ'D.

NOTES
For camber diagram see drawing 8-164-D1
For Sections & Details not shown see drawing 8-164-S2
For sizes of material see Bill of Material 8-164-S

DRAWN	5-5-58	E.P.T.
REVISION		
REVISION		
REVISION		

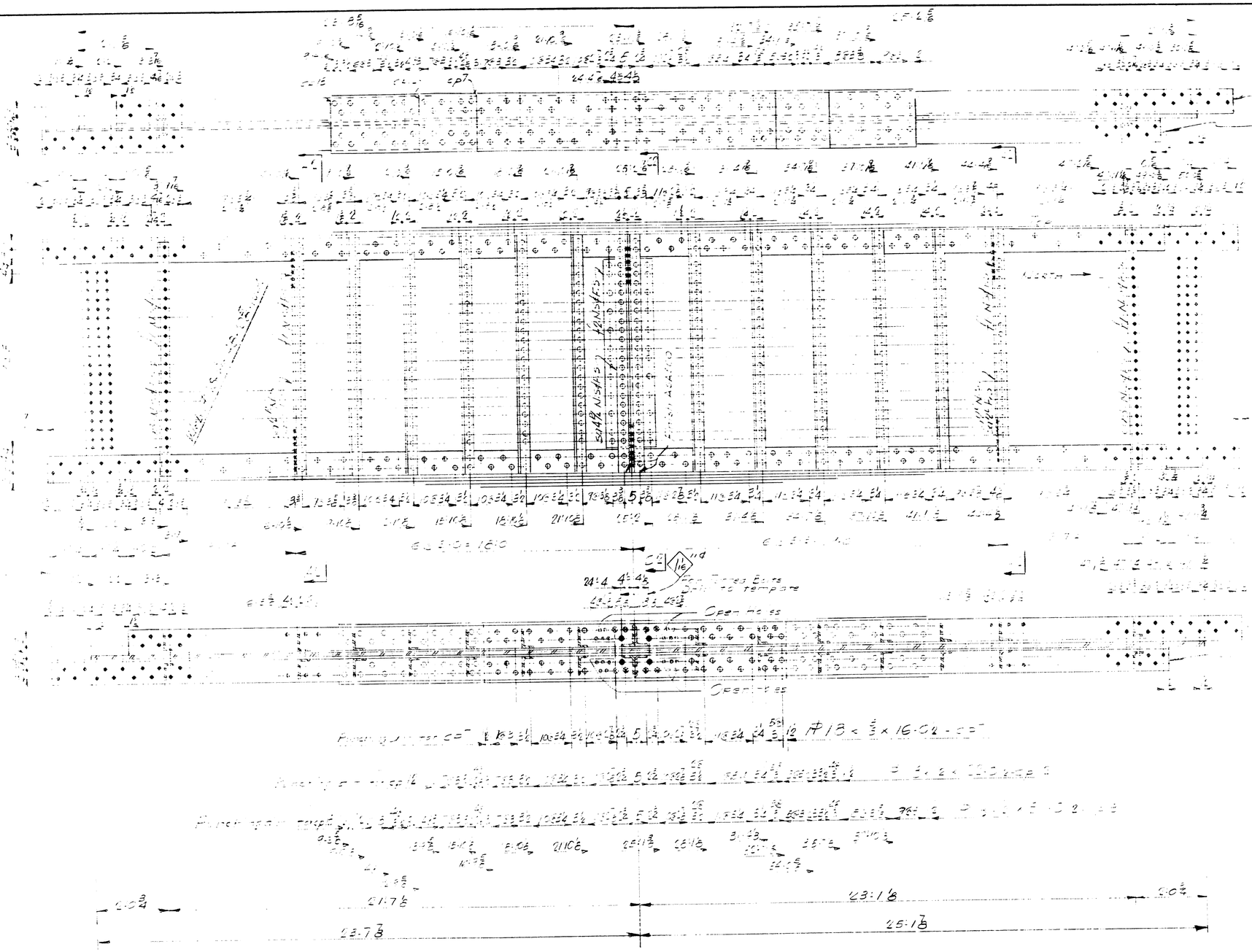
BUILT BY
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEY'S BRIDGE
PORTLAND, MAINE

CUSTOMER [illegible]
DESIGNER [illegible]

ORDER NO. [illegible] DWG. NO. 8-164-S

76-183



GIRDER G2C - 1 REQ'D.

NOTES

For camber diagram see drawing 8-164-D1
For SECTIONS & DETAILS not shown see drawing 8-164-S2
For sizes of material see Bill of Material 8-164-S1

DRAWN		
REVISION		
REVISION		
REVISION		

NOTES

BRIDGE

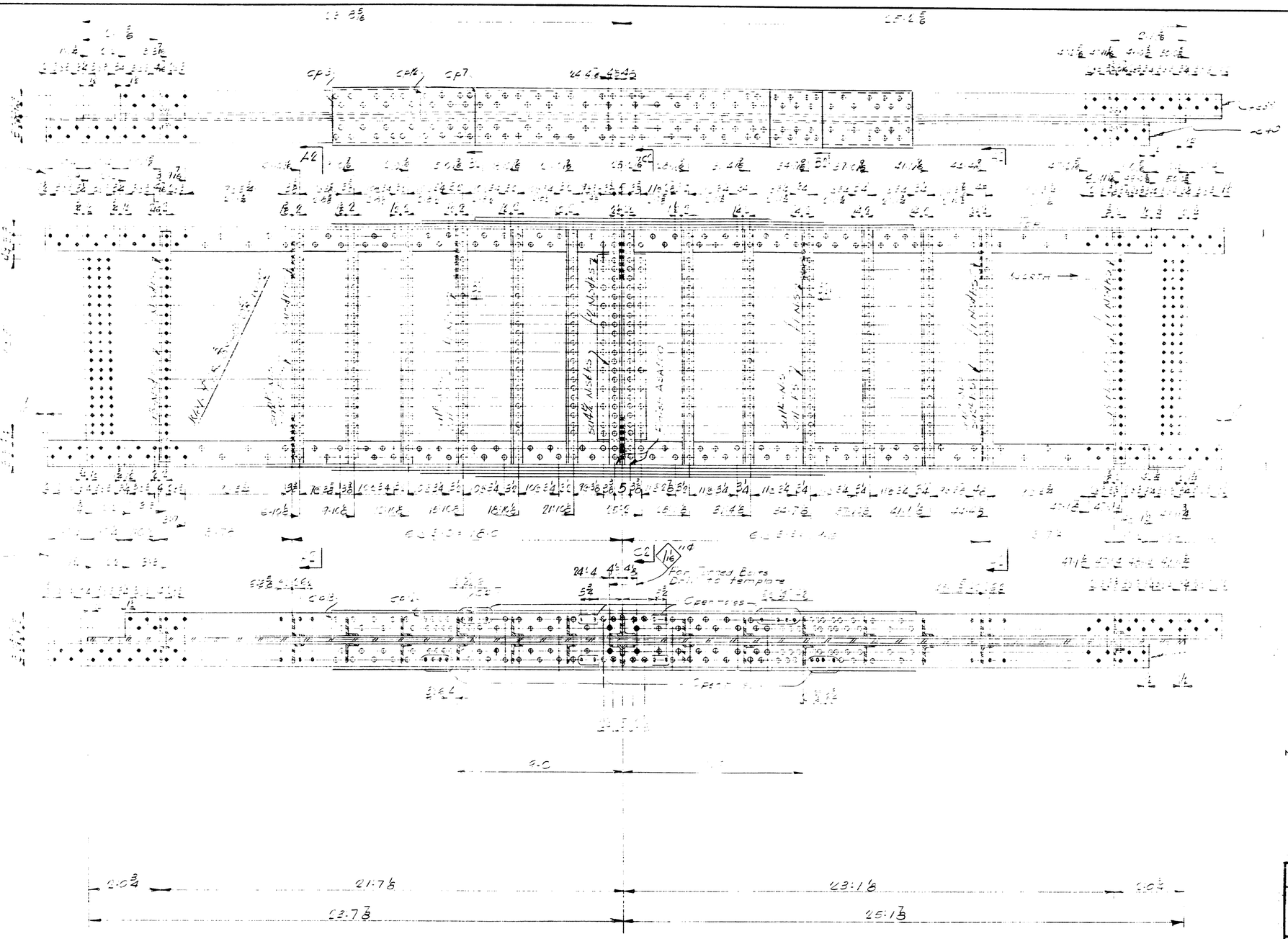
Bancroft & Martin Rollins Wells & Company
South Portland 7, Maine

TUKEY'S BRIDGE
PORTLAND MAINE

CUSTOMER
DESIGNER

ORDER NO. DWG. NO. 8-164-S

76-184



GIRDER G2 C - 1 REQ'D

For diaphragm and splice see B & C Bridge sheet B-164-S15

NOTES

For camber diagram see drawing B-164-D1
For SECTIONS & DETAILS not shown see drawing B-164-S2
For sizes of material see Bill of Material B-164-S3

NOTES:

GIRDER

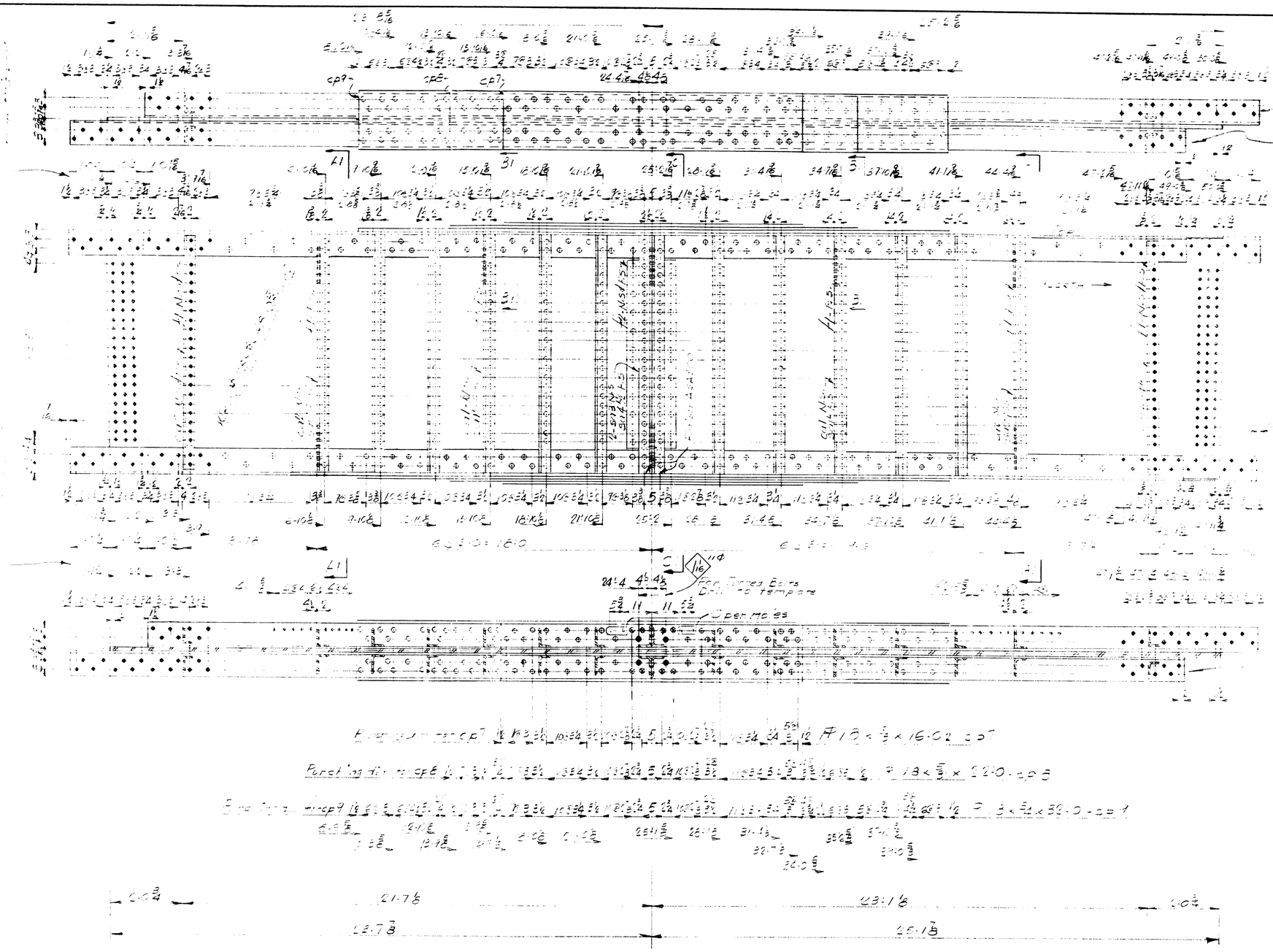
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEY'S BRIDGE
PORTLAND, MAINE

DRAWN			
REVISION			
REVISION			
REVISION			

CUSTOMER [illegible]
DESIGNER [illegible] B. & C. Bridge Div.
ORDER NO. [illegible] DWG. NO. B-164-S

76-185



GIRDER G2E - 1 REQD.

NOTES:

For camber diagram see drawing 8-164-D1
For SECTIONS & DETAILS not shown see drawing 8-164-S2
For sizes of material see Bill of Material on 8-164-S

BUILDER
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

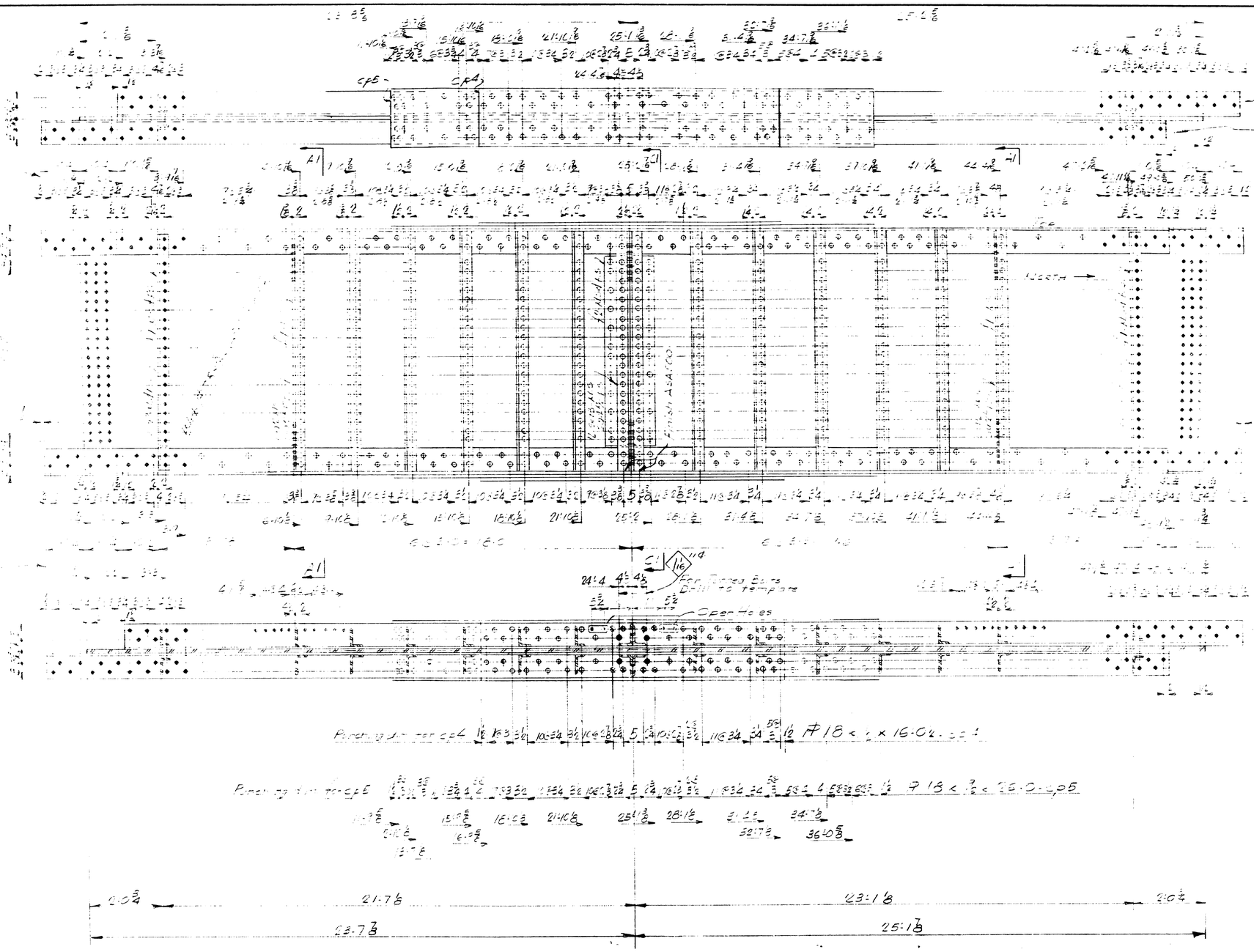
TUKEYS BRIDGE
PORTLAND MAINE

CUSTOMER STATE HIGHWAY COMM.
DESIGNER MAINE STATE BRIDGES

DRAWN	7-3-56	C.E.S.
REVISION		
REVISION		
REVISION		

ORDER NO. 4666 DWG. NO. 8-164-S

76-186



GIRDER G2F - 1 REQ'D.

NOTES.

NOTES
For camber diagram see drawing 8-164-D1
For Sections & Details not shown see drawing 8-164-S2
For sizes of material see Bill of Material 8-164-S 3

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Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

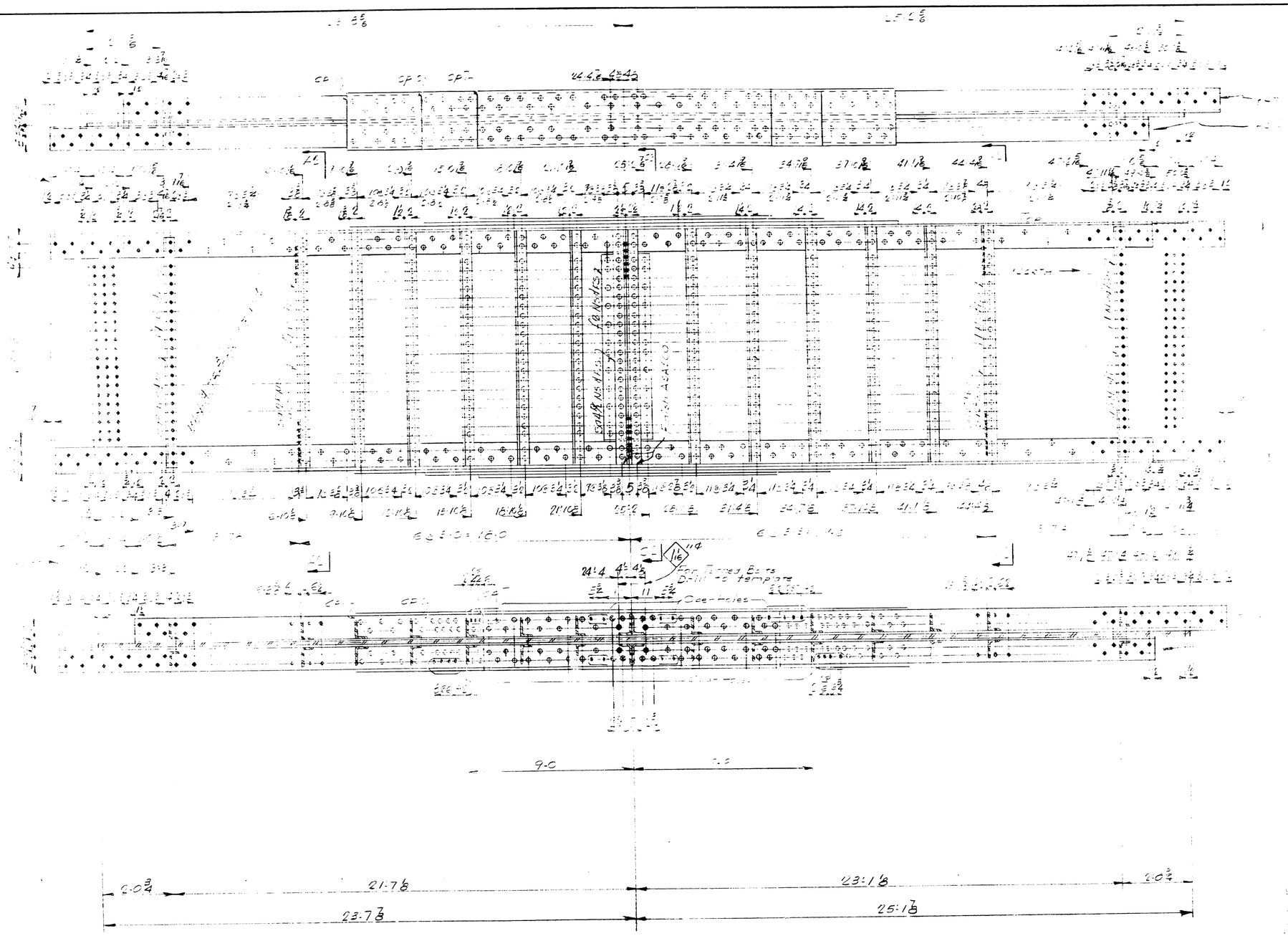
TUKEY'S BRIDGE
PORTLAND MAINE

CUSTOMER [illegible]
DESIGNER [illegible] S T C Bridge Div

ORDER NO. [illegible] DWG. NO. 8-164-S 3

DRAWN	7-[illegible]-56	[illegible]	[illegible]
REVISION	[illegible]	[illegible]	[illegible]
REVISION			
REVISION			

76-187



GIRDER G2E - 1 REQ'D.

NOTES

For camber diagram see drawing 8-164-D1
For SECTIONS & DETAILS not shown see drawing 8-164-S2
For sizes of material see Bill of Material 8-164-S 3

NOTES:

DRAWN			
REVISION			
REVISION			
REVISION			

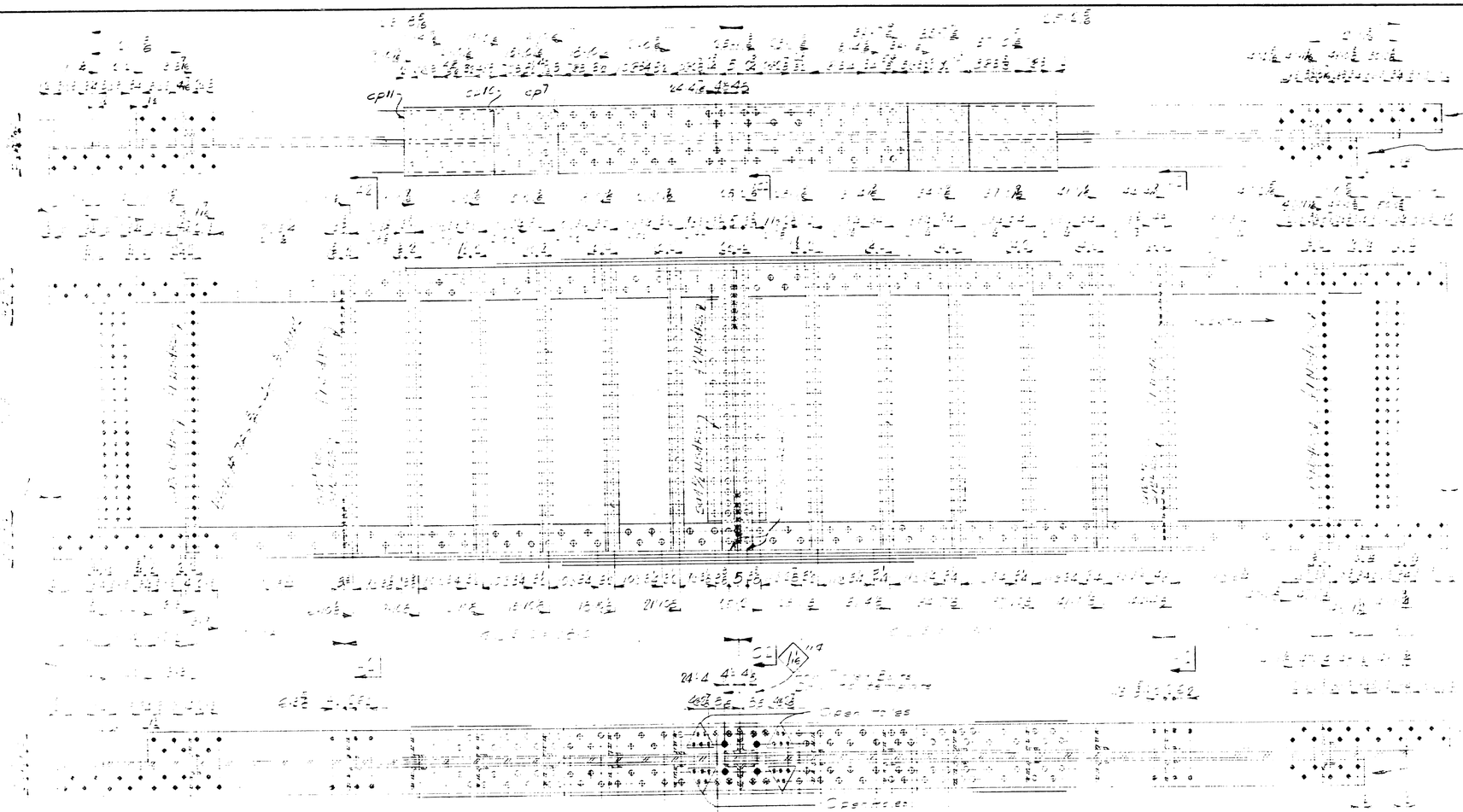
FABRICATED BY
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEY'S BRIDGE
PORTLAND, MAINE

CUSTOMER [illegible]
DESIGNER [illegible]

ORDER NO. [illegible] DWG. NO. 8-164-S 7

76-188



GIRDER G2M - 1 REQ'D.

NOTES

For camber diagram see drawing S-164-D1
For Section & Details not shown see
Drawing S-164-S2
For sizes of material see Bill of Materials on drawing S-164-S3

Bancroft & Martin-Welling-Mills & Company
South Portland 7, Maine

TUNELO BRIDGE
PENOBSCOT COUNTY, MAINE

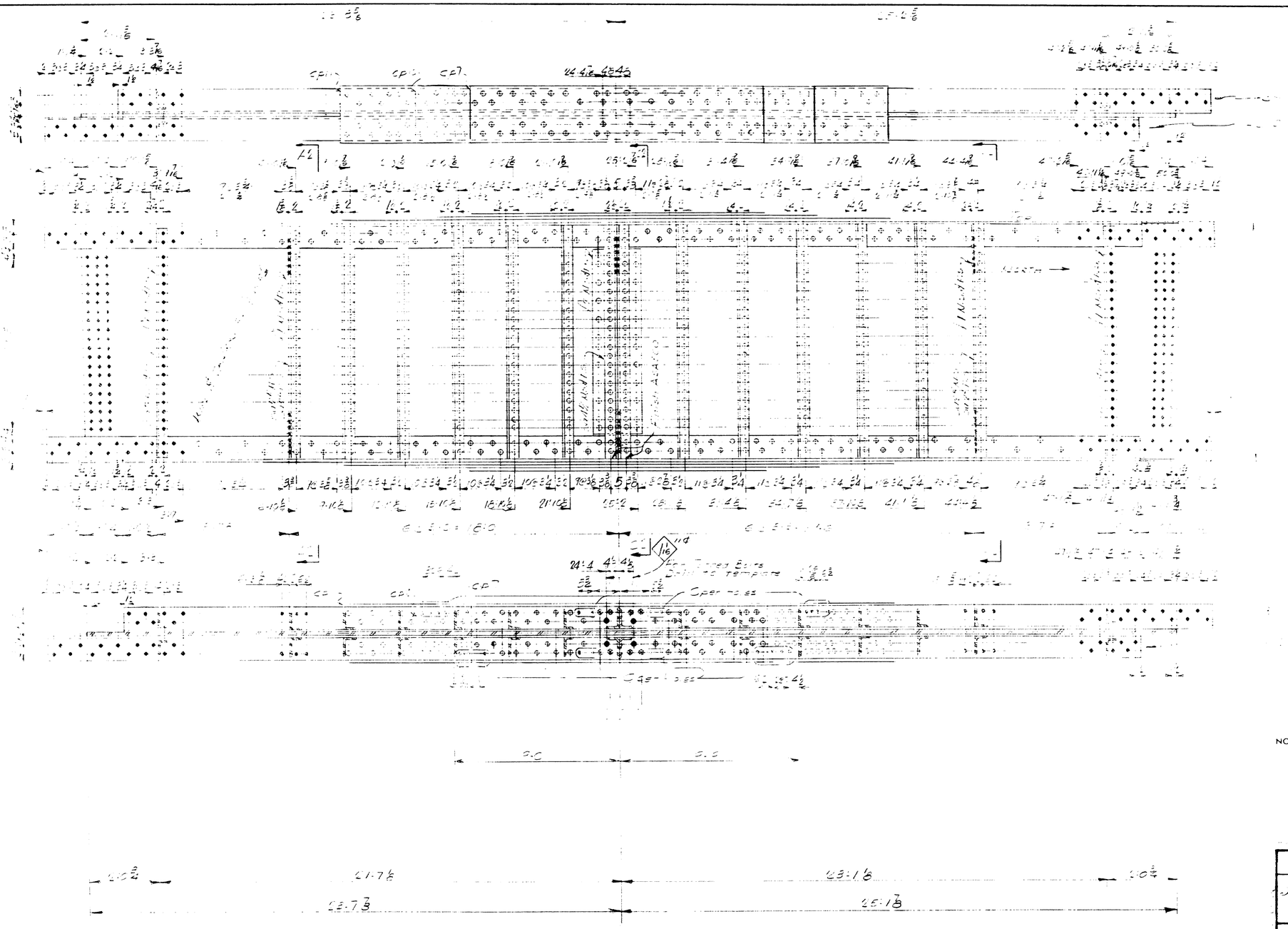
CUSTOMER
DESIGNER

DRAWN		
REVISION		
REVISION		
REVISION		

ORDER NO.

DWG. NO. S-164-S3

76-189



GIRDER G2I - 1 REQD

NOTES

For camber diagram see drawing 8-164-D1
For SECTIONS & DETAILS not shown see drawing 8-164-S2
For sizes of material see Bill of Material 8-164-S3

NOTES:

Bancroft & Martin Rollins Wells & Company
South Portland 7, Maine

TUKEYS BRIDGE

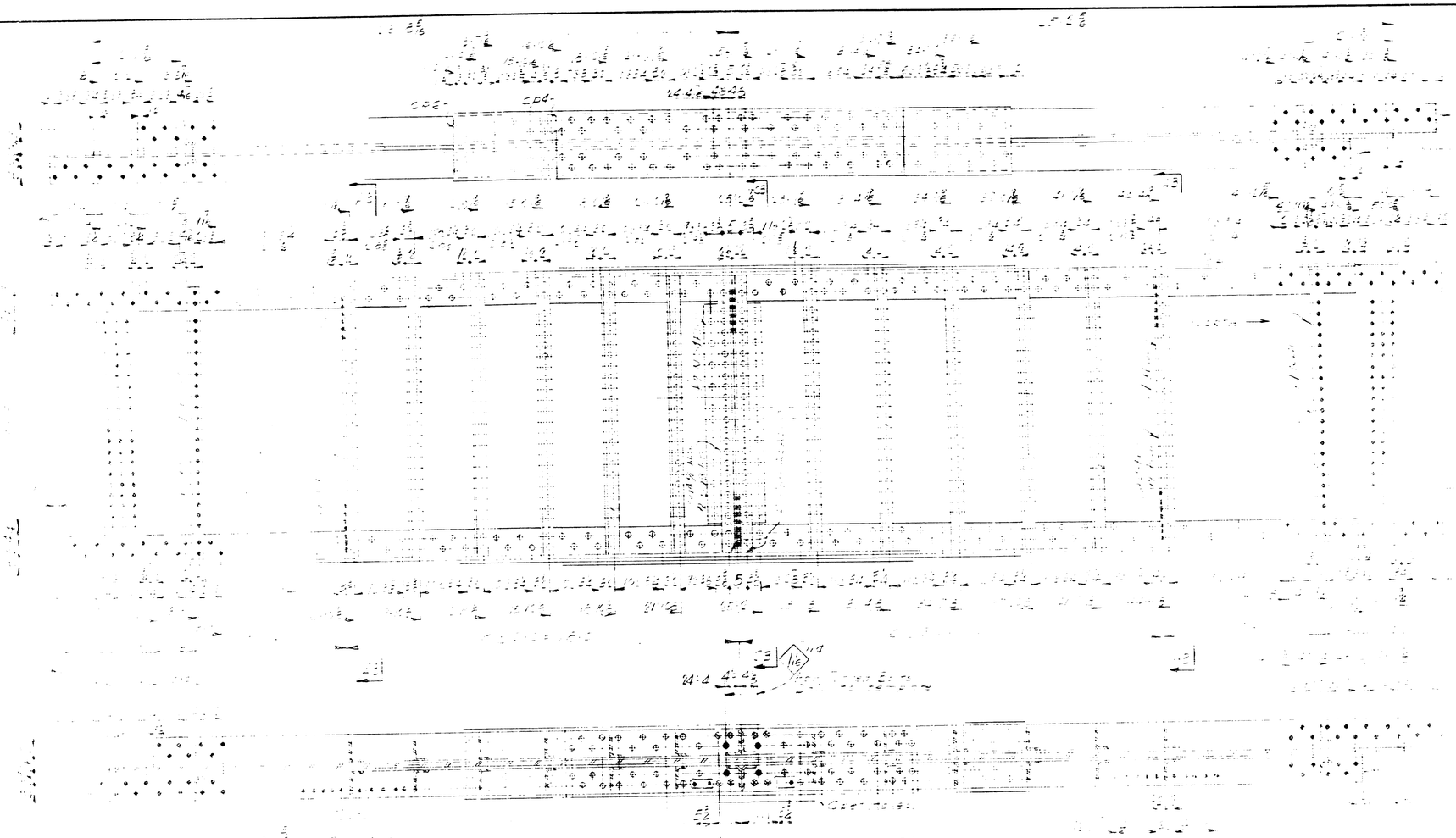
DRAWN		
REVISION		
REVISION		
REVISION		

CUSTOMER
DESIGNER

ORDER NO.

DWG. NO. 8-164-S1

76-190



GIRDER SPAN - 1 ROAD

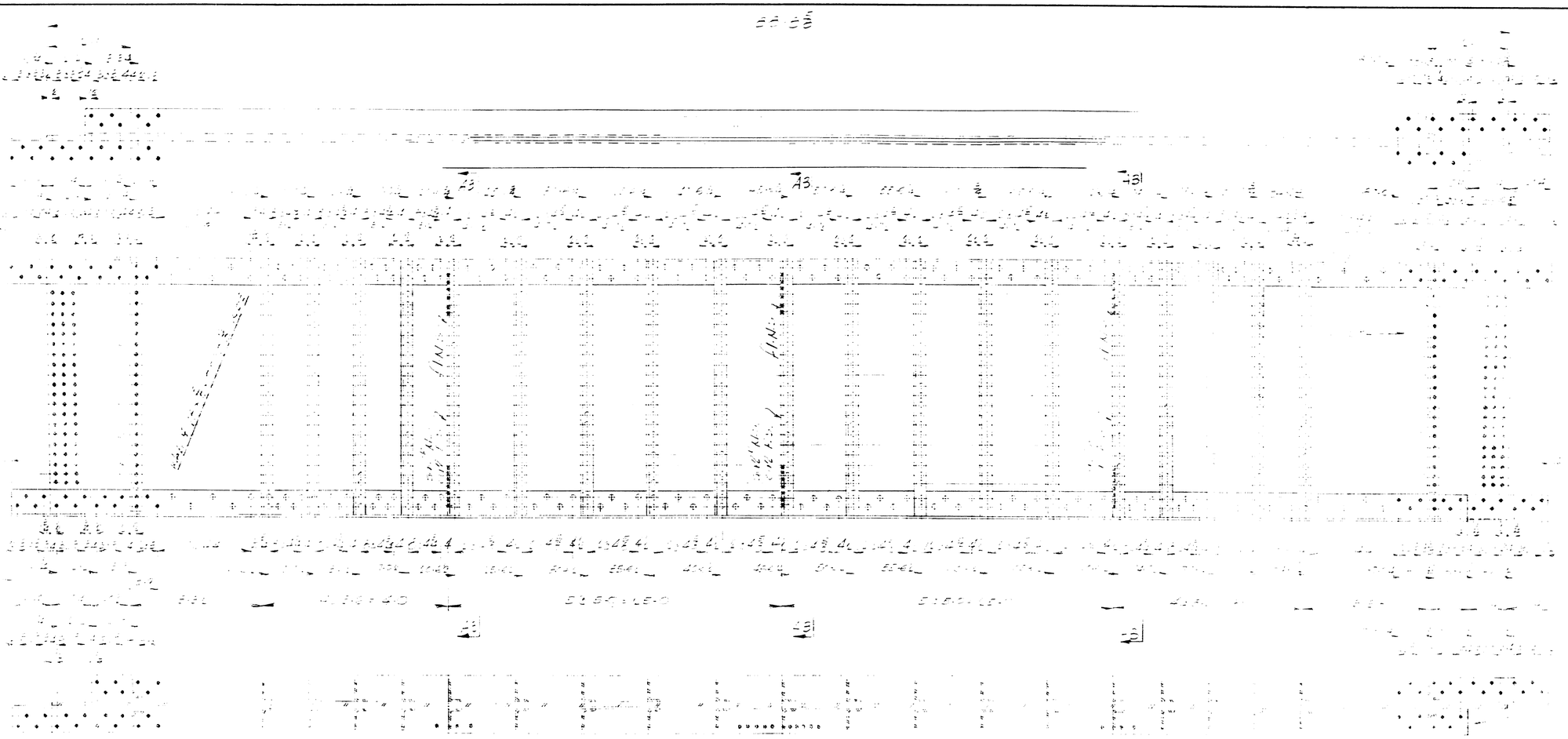
NOTES

Bancroft Construction Steel Company
South Portland, Maine

DRAWN			
REVISION			
REVISION			
REVISION			

CUSTOMER
DESIGNER
ORDER NO. | DWG. NO.

76-191



PLACER CELL - 1 REQ'D

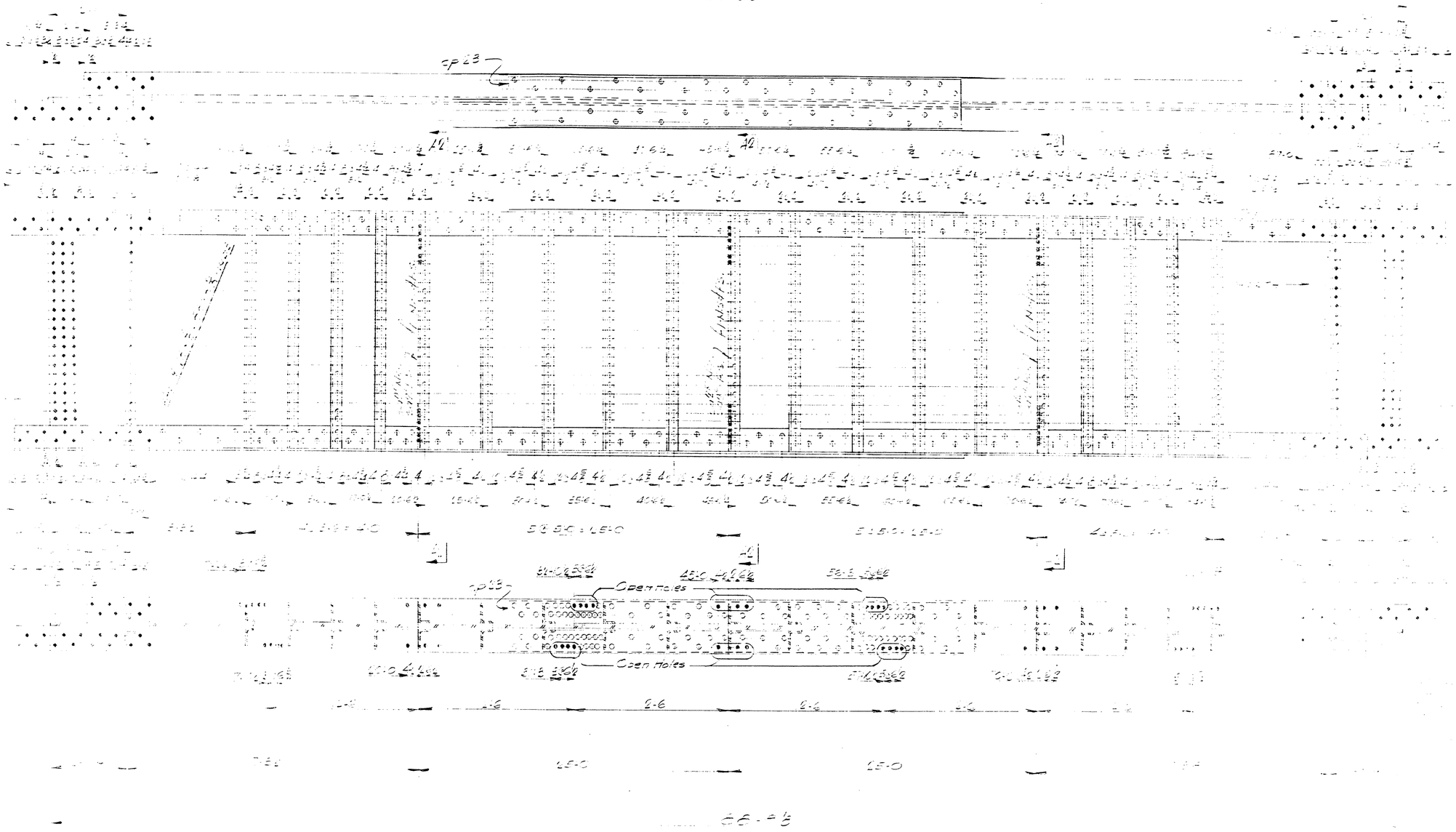
NOTES:
FOR SYMBOLS & TYPICAL DETAILS SEE DRAWING E-1048-01
FOR SECTIONS & DETAILS SEE DRAWING
DRAWING E-1048-02
FOR BILL OF MATERIAL SEE BILL OF MATERIAL E-1048-01

Bancroft & Baden Fitting Co. Inc.
South Portland, Maine

DRAWN			
REVISION			
REVISION			
REVISION			

CUSTOMER
DESIGNER
ORDER NO.
DWG NO.

76-192



FOR DETAILS SEE - 1 REQD

THIS SECTION OUT OF WHEN SEE
SEE DETAIL SHEET E-104-SLB

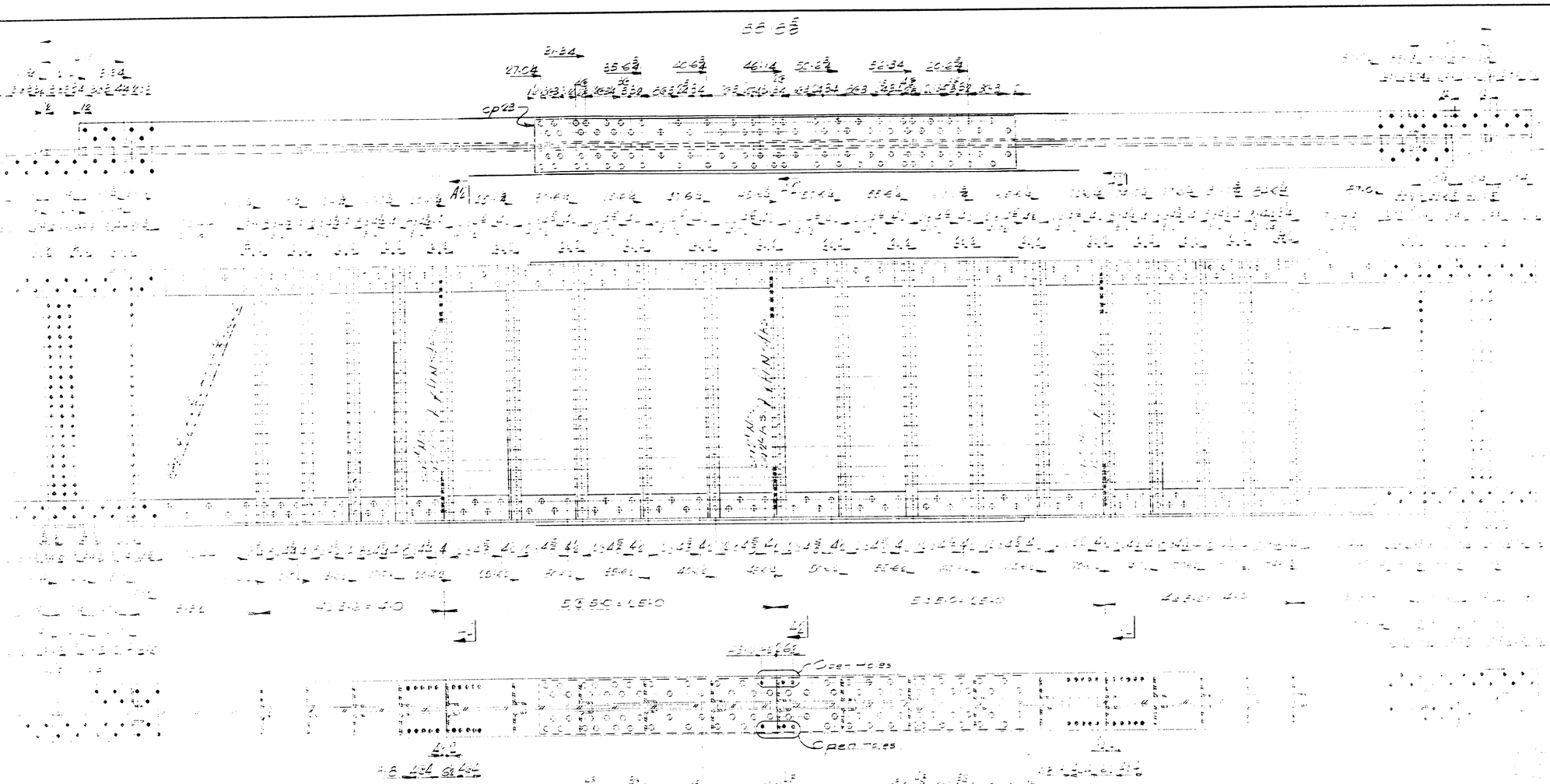
Notes:
For camber Diagram see Drawing E-104-01
For SECTIONS & DETAILS not shown see
Drawing E-104-SL
For sizes of material see Bill of Material E-104-SLB

Bancroft & Martin Rolling Mill Company
South Portland, Maine

DRAWN		
REVISION		
REVISION		
REVISION		

CUSTOMER
DESIGNED
ORDER NO. DWG NO.

76-193

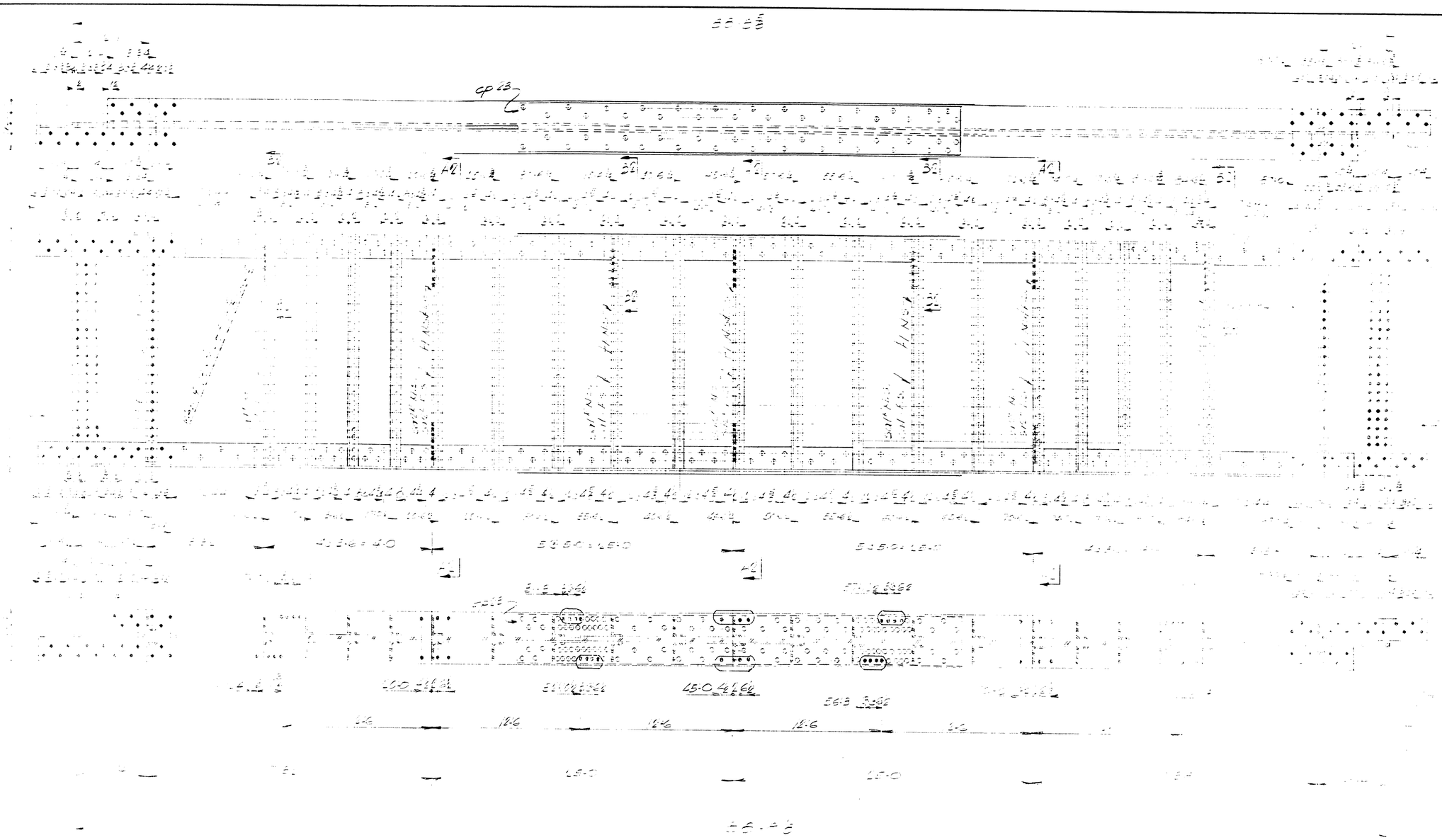


SHEET S-1A-04

Bancroft & Martin Marine Railway Co.
South Portland, Maine

DRAWN	
REVISION	
REVISION	
REVISION	
CUSTOMER	
DESIGNER	
ORDER NO	DWG. NO

76-194



PIPERS FEL - 1 REQ'D

For Section at A-A and 31 Item See
W.S.D. Detail Sheet: S-164-305

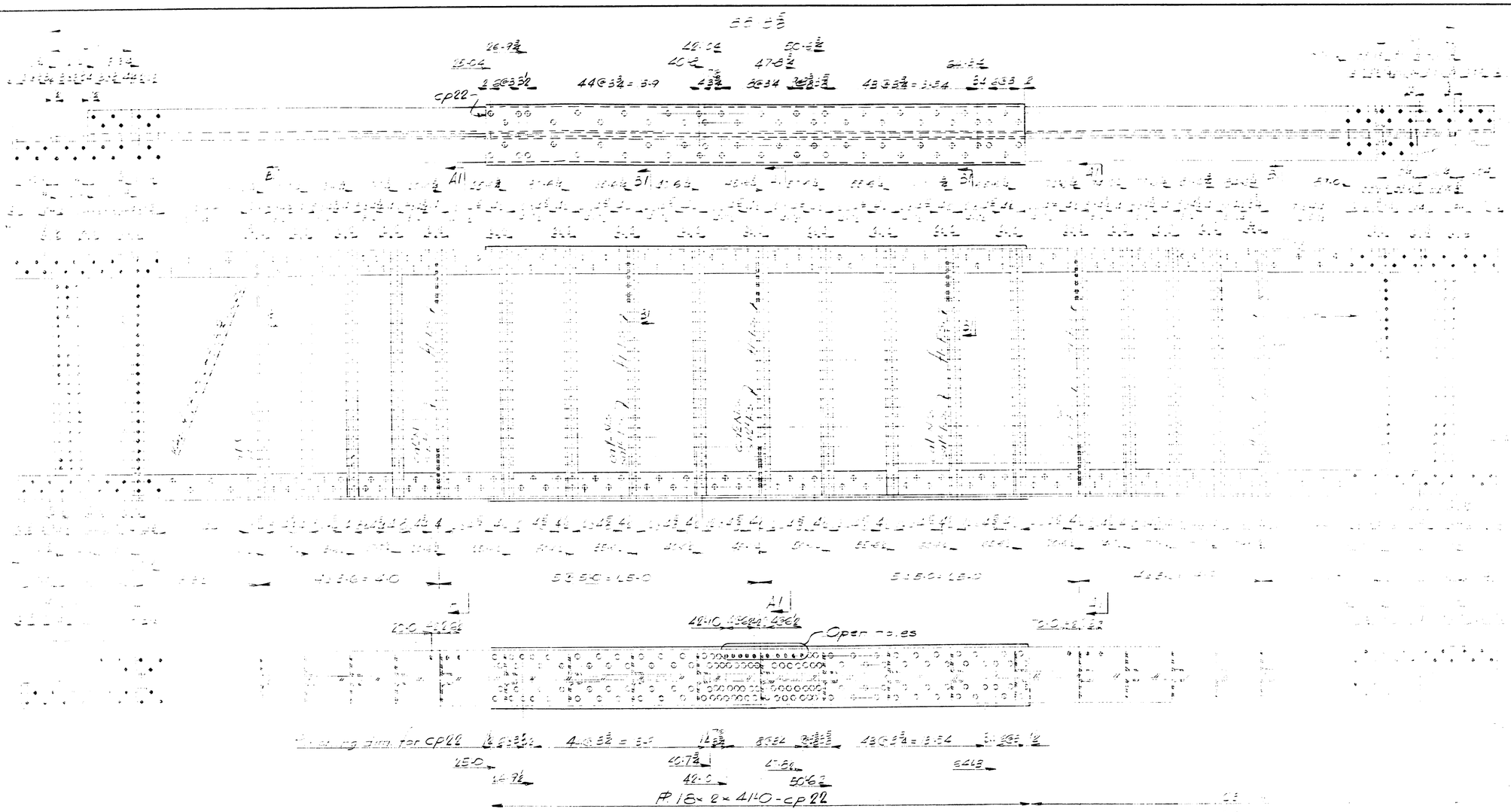
Notes:
For camber diagram see Drawing S-164-01
For Sections & Details not shown see
Drawing S-164-01
For sizes of material see Bill of Material S-164-03

DRAWN			
REVISION			
REVISION			
REVISION			

Bancroft & Martin Parkway, Wells & Company
South Portland 7, Maine

CUSTOMER
DESIGNER
ORDER NO. | DWG. NO.

76-195



SIMILAR SIDE - 1 REQ'D

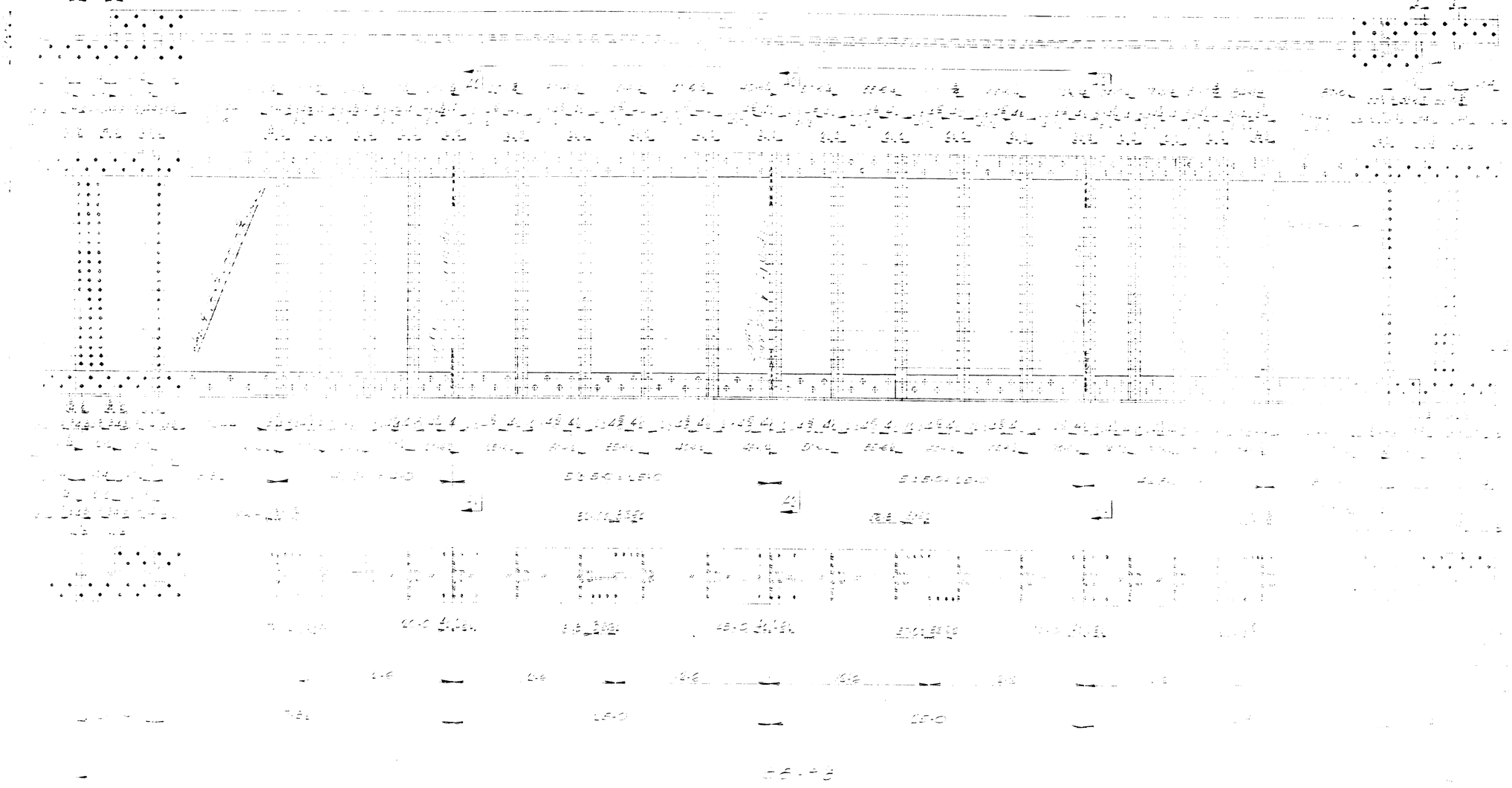
Notes:
For camber & form see Drawing S-164-01
For Sections & Details not shown see
Drawing S-164-02
For sizes of material not shown see Material S-165-05

Bancroft & Martin Tilting Mill Company
South Portland, Maine

DRAWN			
REVISION			
REVISION			
REVISION			

CUSTOMER
DESIGNER
ORDER NO. | DWG. NO. S-164-B

76-196

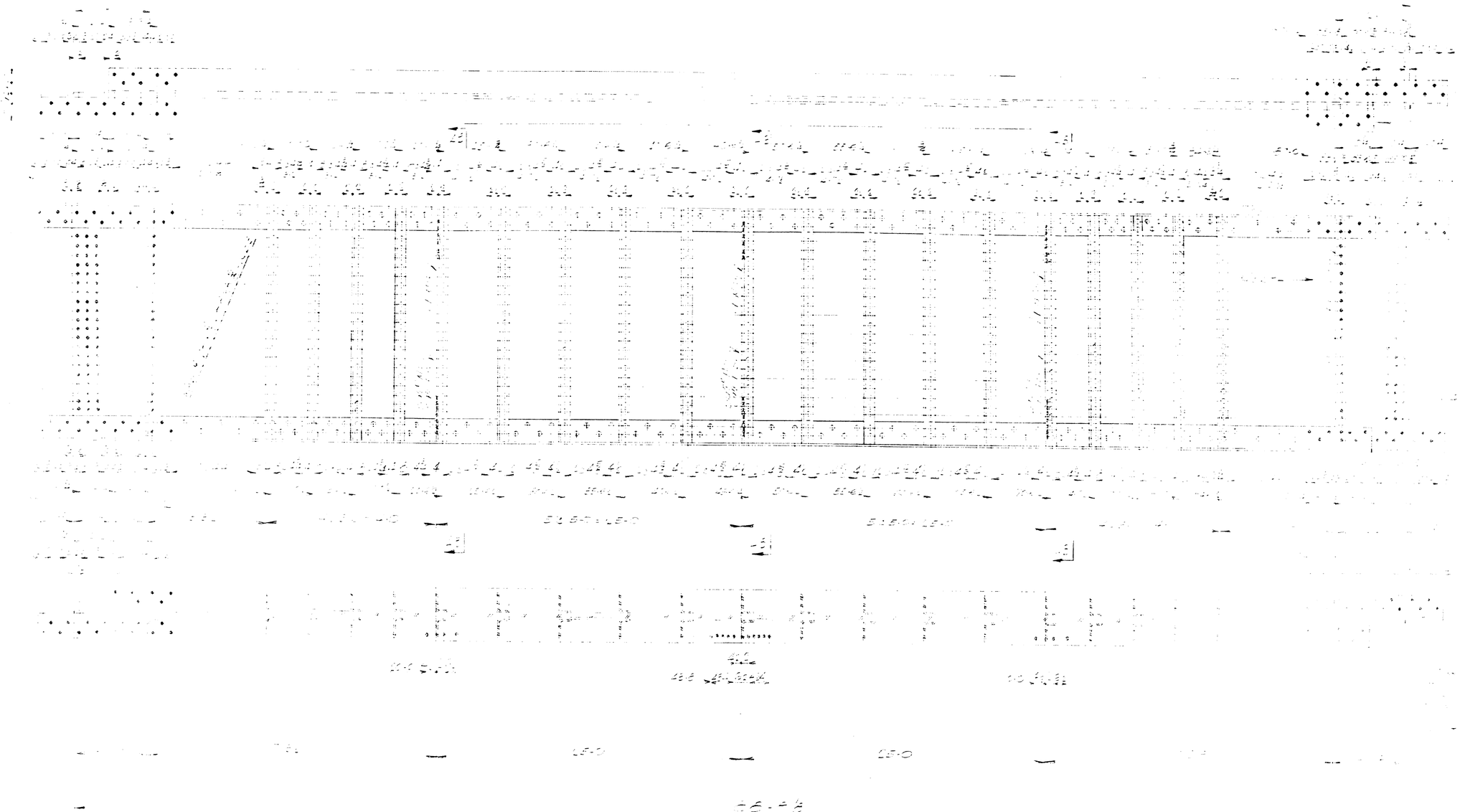


Notes:
For corner fixture see drawing B-1164-L1
For sections & details not shown see drawing B-1164-L1
For class of material see plan or drawing applicable

DRAWN		CUSTOMER	
REVISION		DESIGNER	
REVISION		ORDER NO.	DWG. NO.
REVISION			

Bancroft & Martin Pile Dr. Bridge Co.
South Portland, Maine

76-200



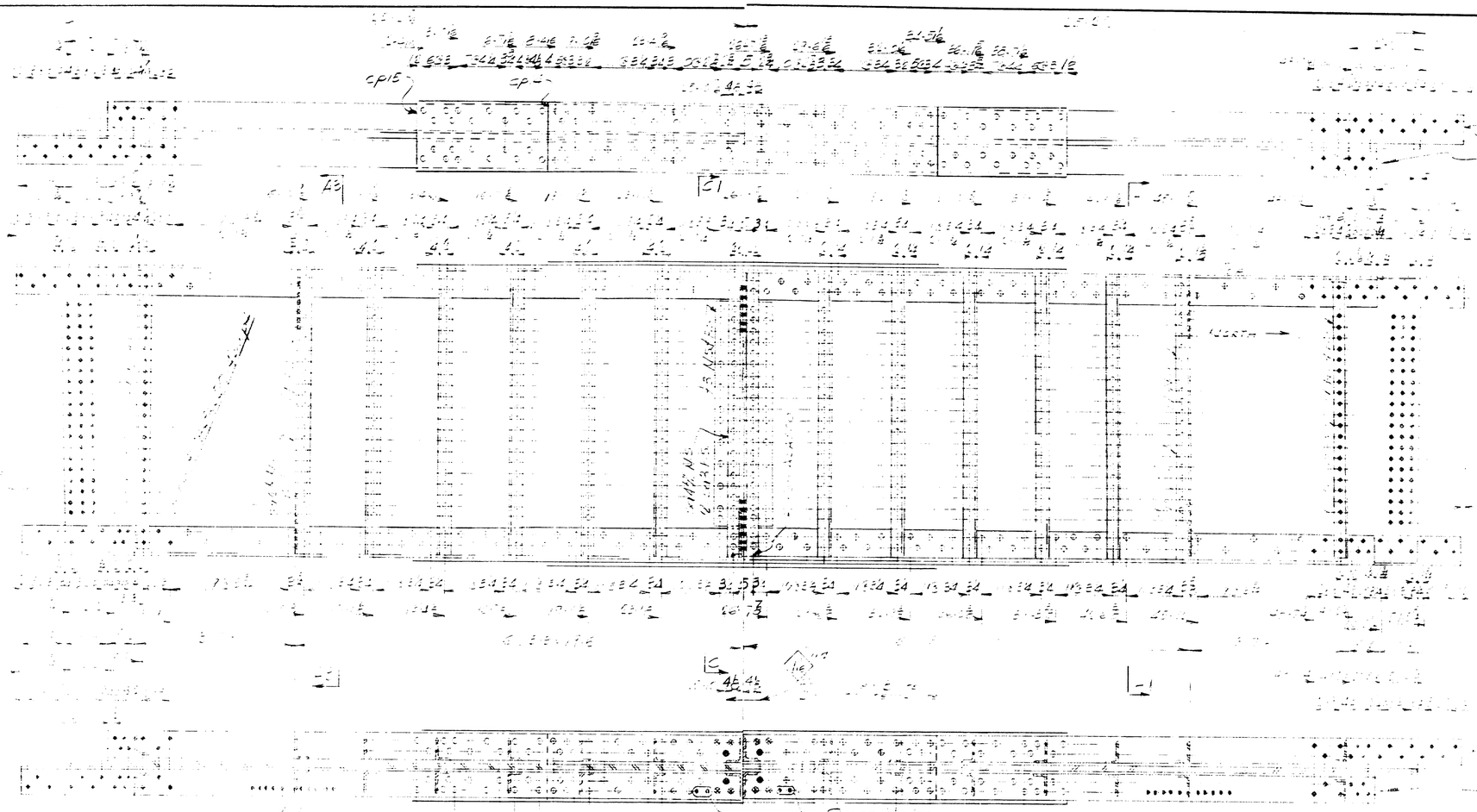
Notes:
For center diagram see Drawing E-164-01
For Sections & Details not shown see
Drawing E-164-01
For sizes of material see Bill of Material E-164-01A

DRAWN			
REVISION			
REVISION			
REVISION			

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

CUSTOMER
DESIGNER
ORDER NO. DWG. NO.

76-201



GIRDER G4L-1 REQ'D.

NOTES

For camber diagram see drawing B-184-D1
For Sections Details not shown see drawing B-184-S2
For sizes of material see Bill of Materials

DRAWN		
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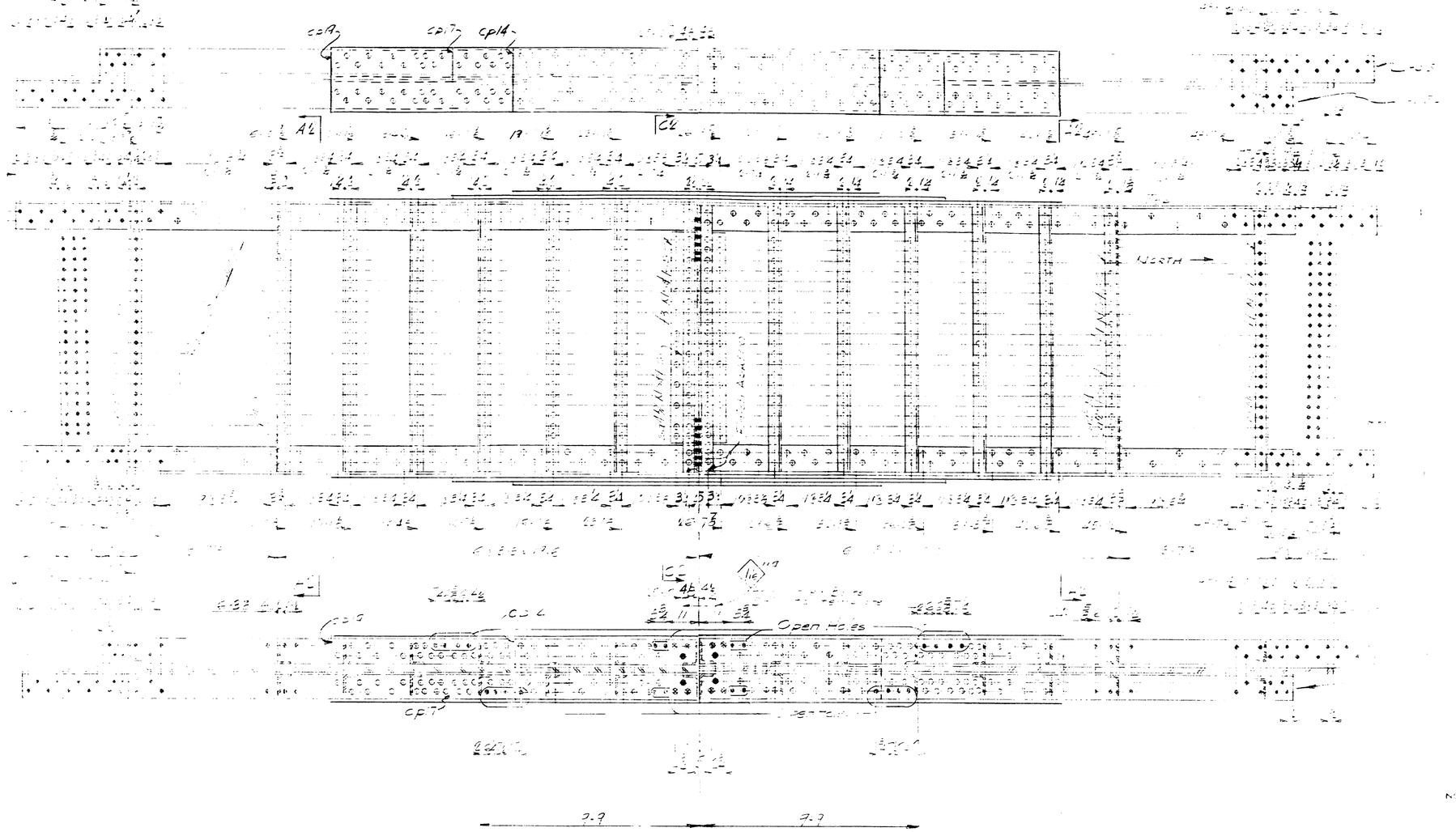
REVISION		
REVISION		

Bancroft & Martin Rolling Mill Company
South Portland, Maine

CUSTOMER
DESIGNED
ORDER NO. | DWG. NO.

76-202



GIRDER G4B - 1 REQ'D.

NOTES

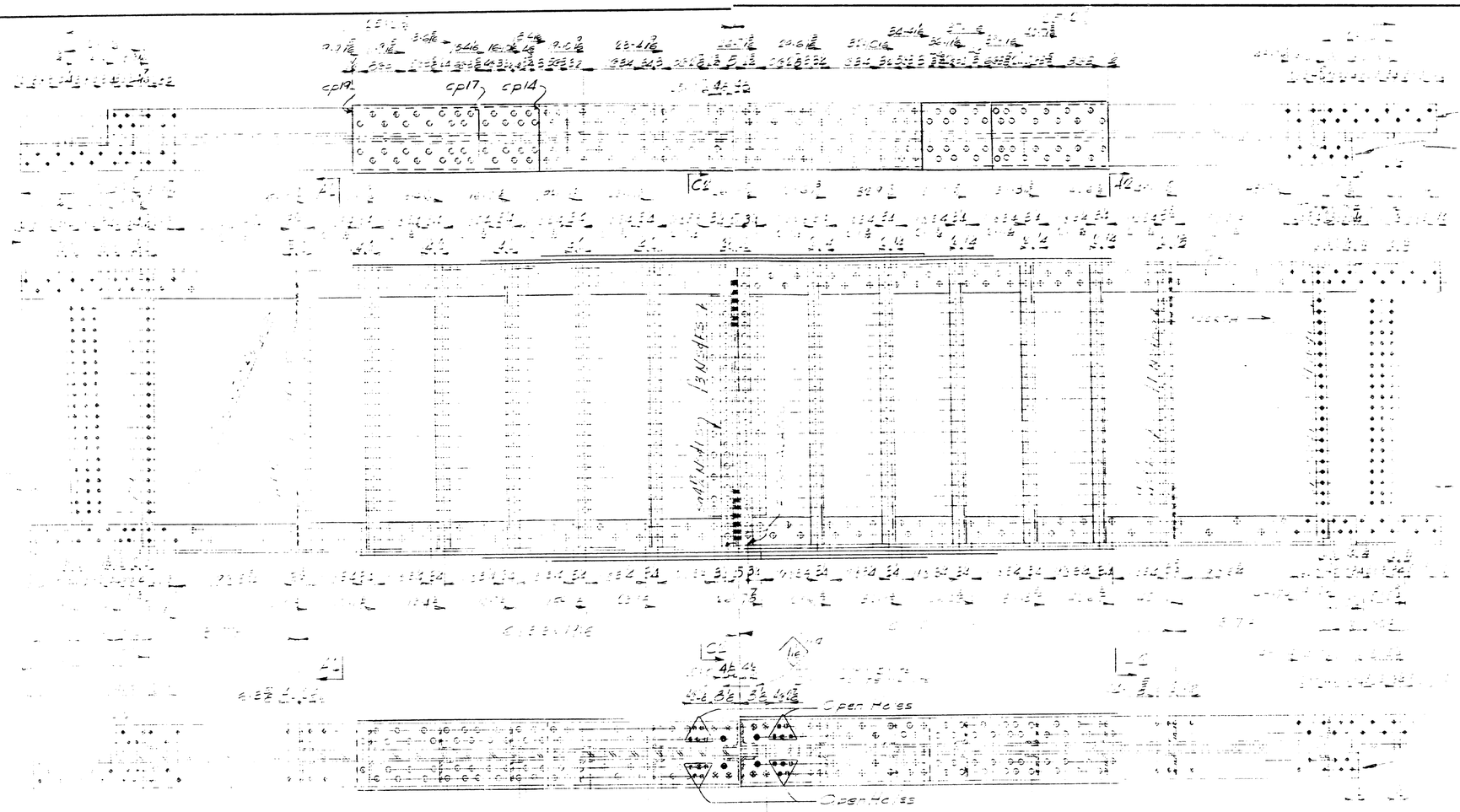
For camber diagram see drawing B-164-D1
For Sections & Details not shown see Drawing B-164-S4
For sizes of material see Bill of Materials B-164-S3

Bancroft & Martin Rolling Mills Company
South Portland, Maine

DRAWN	
REVISION	
REVISION	
REVISION	

CUSTOMER
DESIGNER
ORDER NO.
DWG. NO.

76-203



GIRDER G-1C - 1 REQ'D.

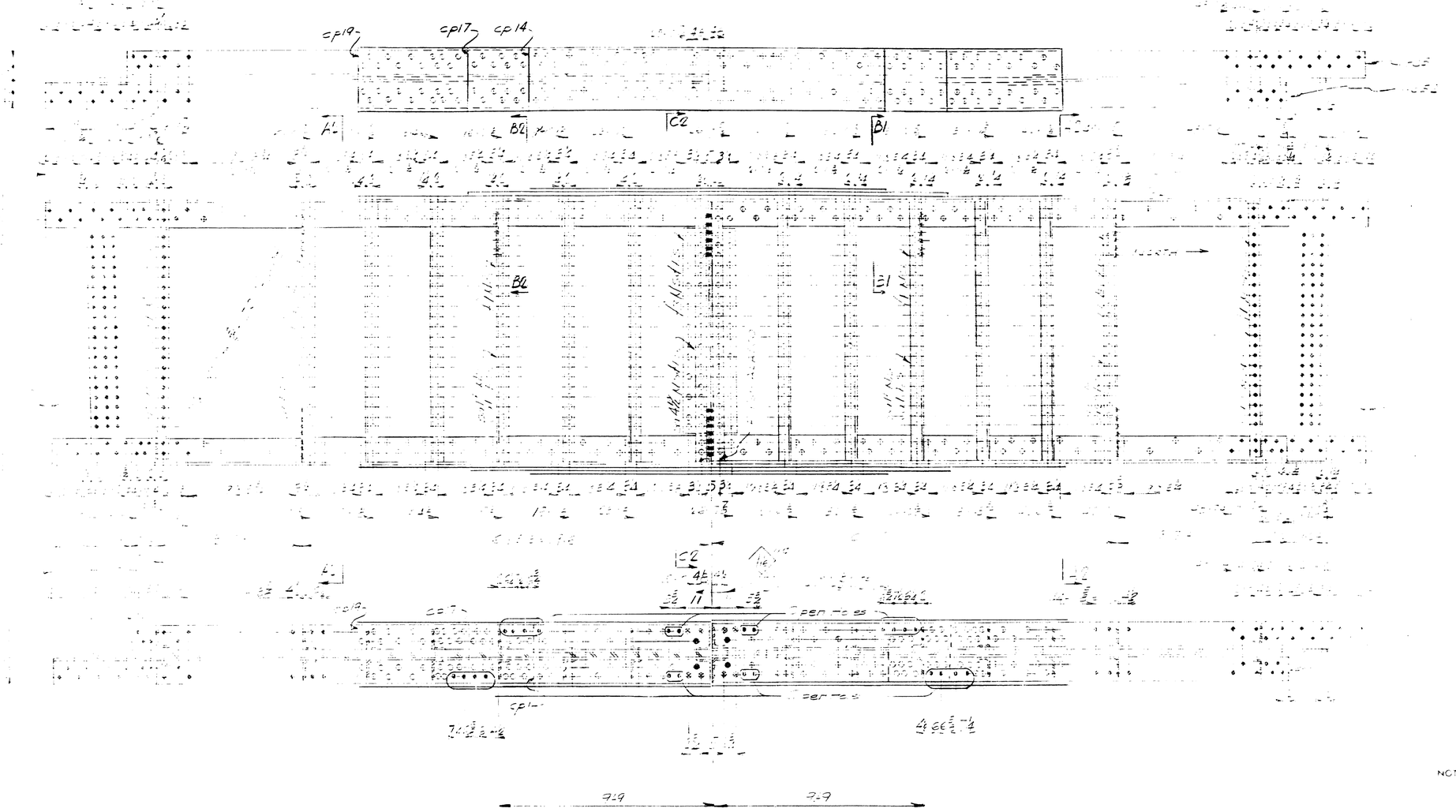
NOTES

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

DRAWN	
REVISION	
REVISION	
REVISION	

CUSTOMER
DESIGNER
ORDER NO.
DWG. NO.

76-204



GIRDER F4D-12B2

For splice at "C" see Drawing S-164-S25

For camber diagram see drawing S-164-D1
For splicing details not shown see Drawing S-164-S2
For sizes of material see bill of material on sheet S3

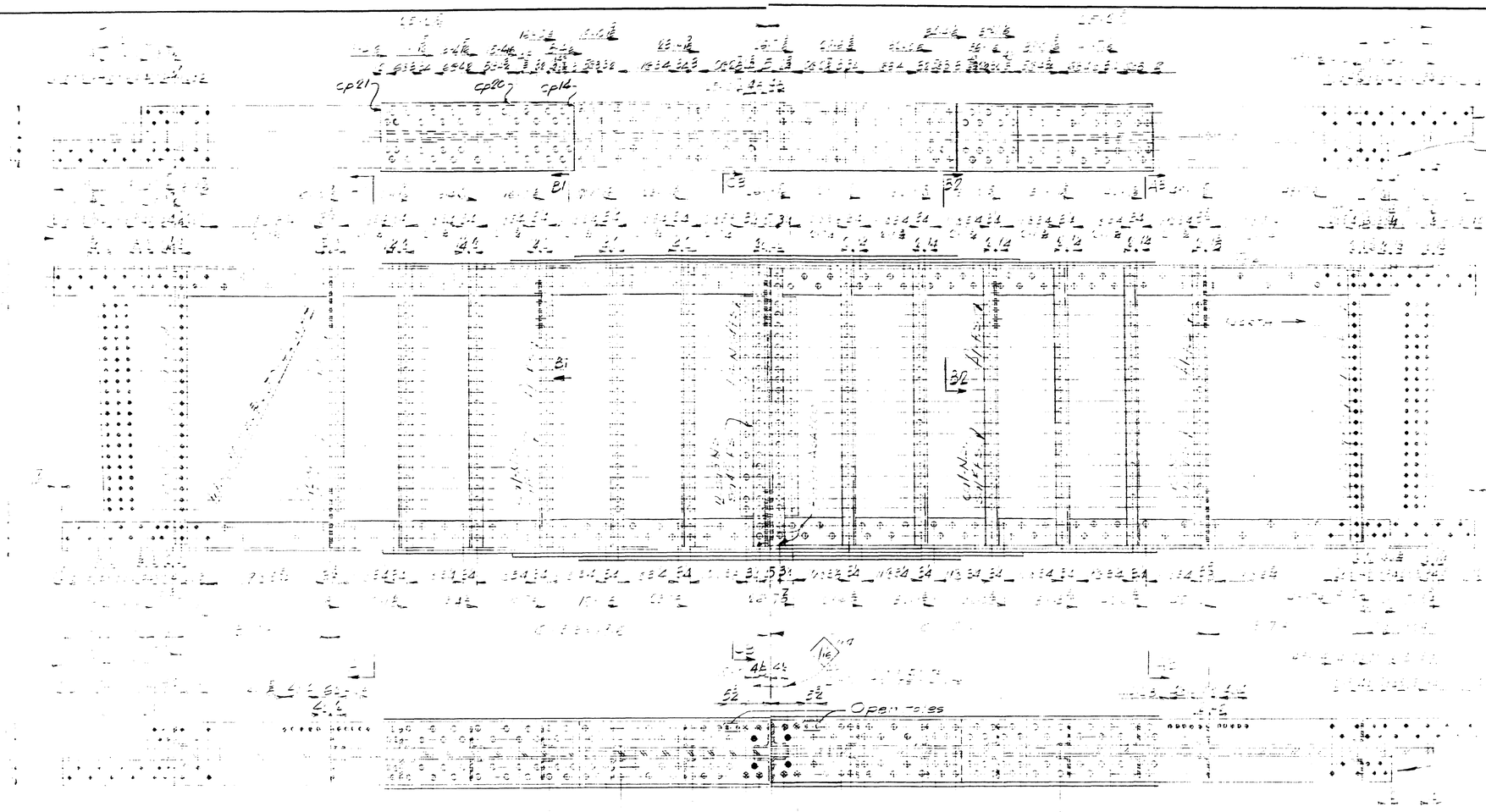
NOTES

DRAWN	
REVISION	
REVISION	
REVISION	

Bancroft & Martin Rolling Mills Company
South Portland, Maine

CUSTOMER
DESIGNER
ORDER NO. DWG. NO.

76-205



GIRDER G4E-1 REQD.

NOTES

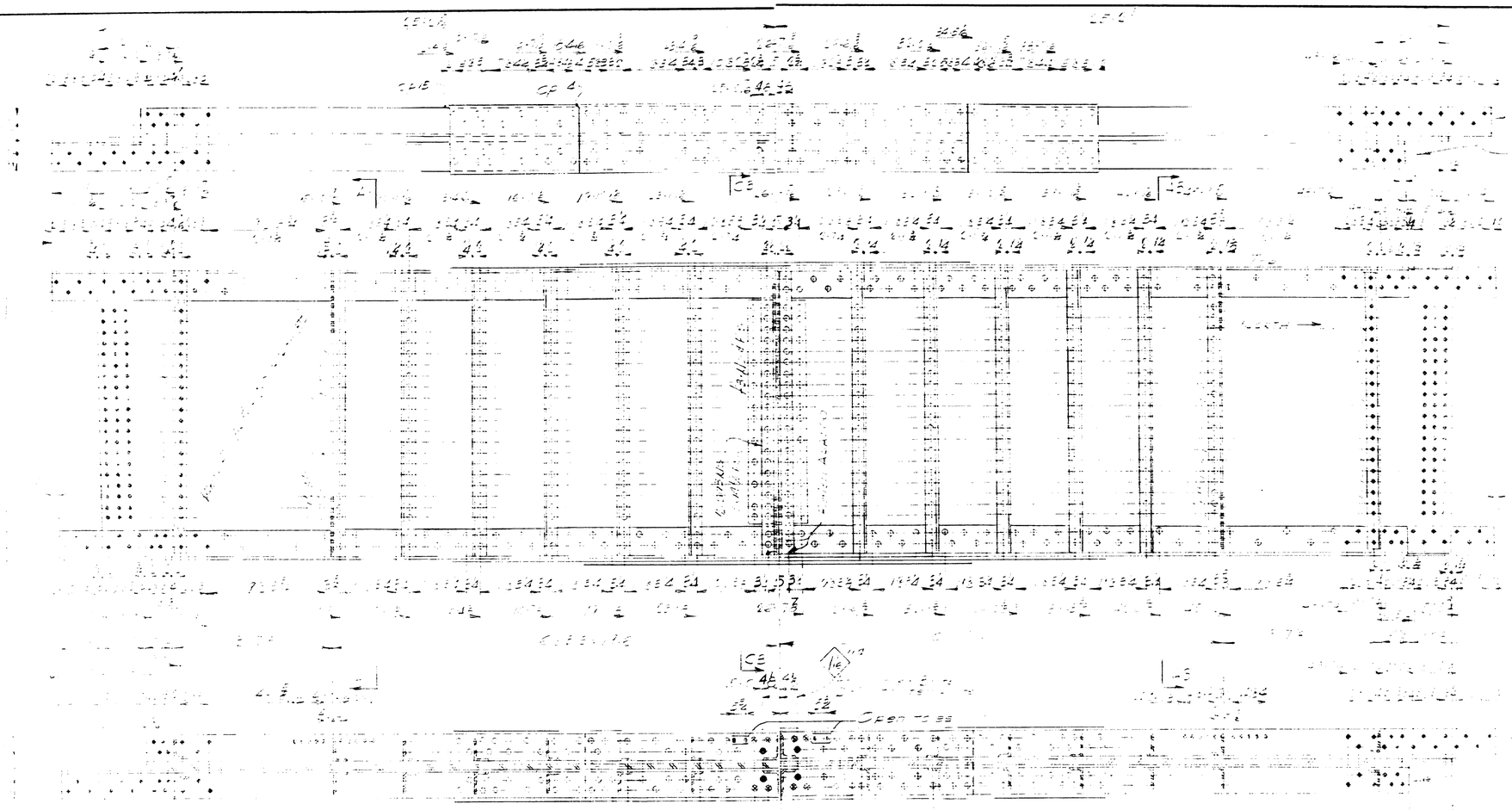
For camber diagram see drawing S-164-D1
For Section Details not shown see Drawing S-164-S2
For sizes of material see Bill of Materials

Bancroft & Martin Rolling Mills Corp.
South Portland, Maine

DRAWN
REVISION
REVISION
REVISION

CUSTOMER
DESIGNER
ORDER NO.
DWG. NO.

76-207



GIRDER G4F-1 REQ'D.

NOTES

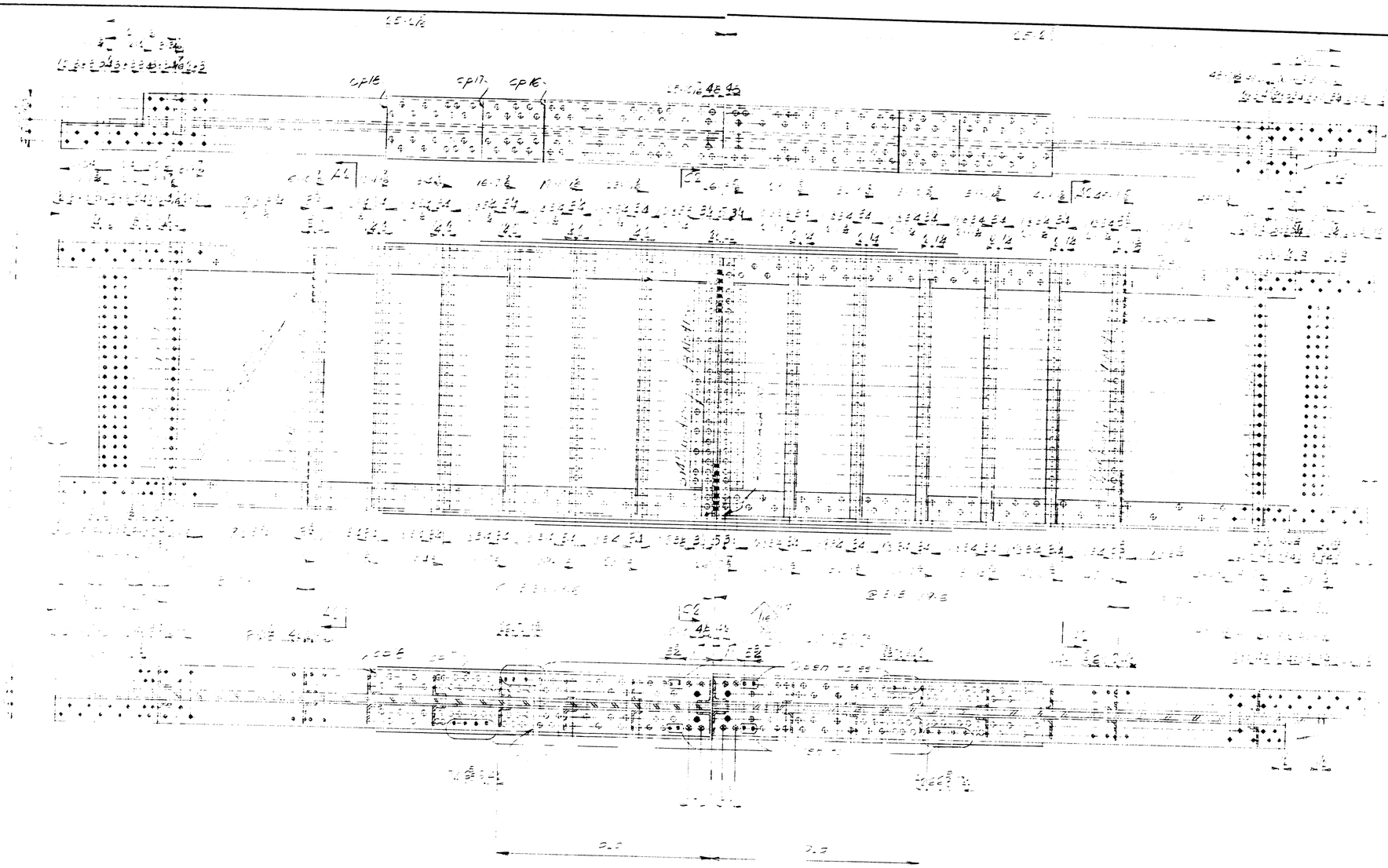
For camber diagram see drawing 8-164-01
For Section Details not shown see Drawing E-164-52
For sizes of material see Bill of Material on drawing E-164-52

DRAWN			
REVISION			
REVISION			
REVISION			

Bancroft & Martin-Kellogg-Wells Company
South Portland 7, Maine

CUSTOMER
DESIGNER
ORDER NO
DWG. NO.

76-208



NOTES:

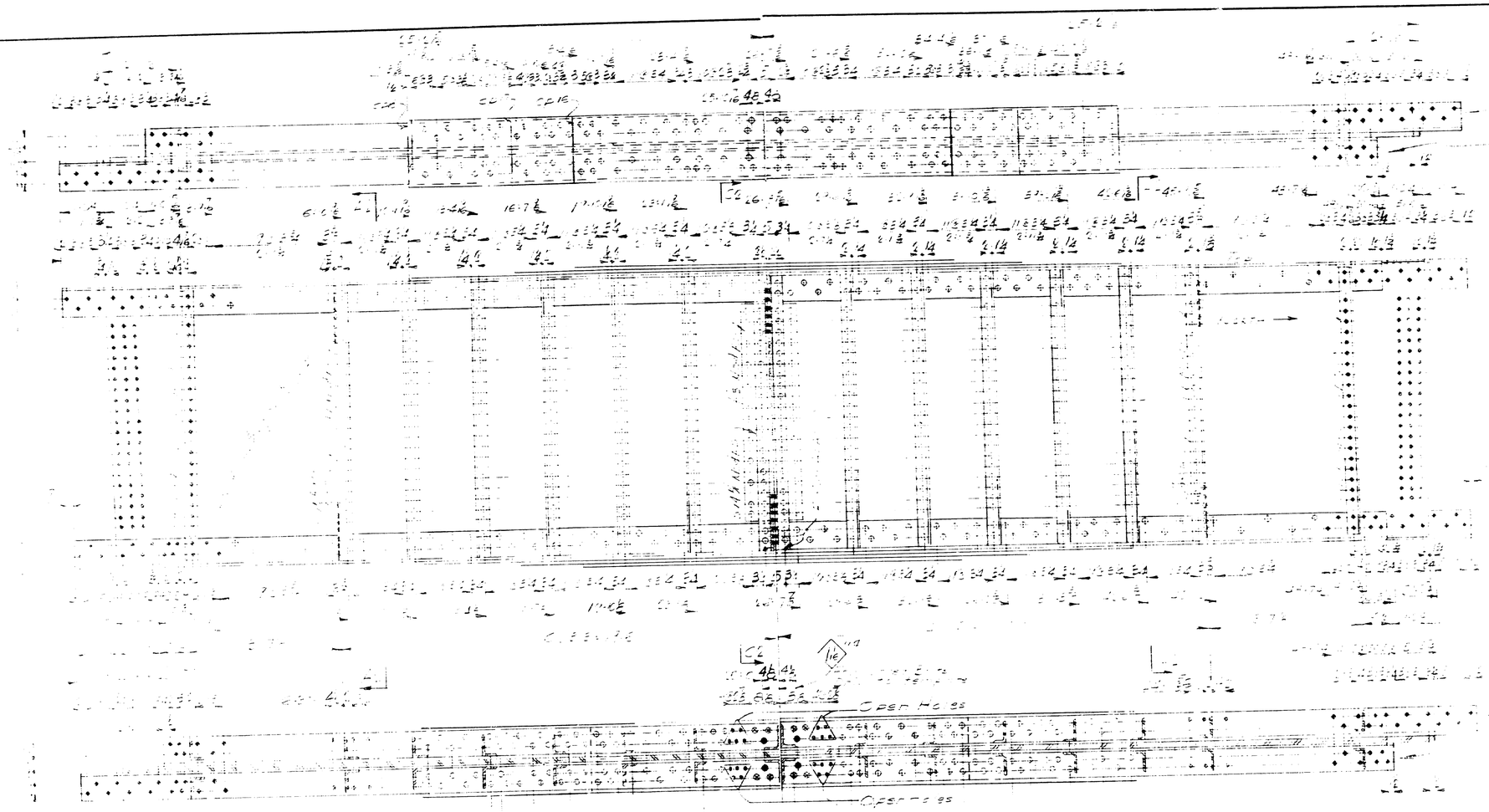
GIRDER G-1 REQD.

DRAWN	
REVISION	
REVISION	
REVISION	

Bancroft & Martin Welling Welding Company
South Portland Maine

CUSTOMER
DESIGNER
ORDER NO. DWG. NO.

76-209



GIRDER G4 H-1 REQ'D.

NOTES

For camber diagram see drawing 8-164-D1
For SECTIONS & DETAILS not shown see drawing 8-164-S2
For sizes of material see Bill of Material 8-164-S3

NOTES:

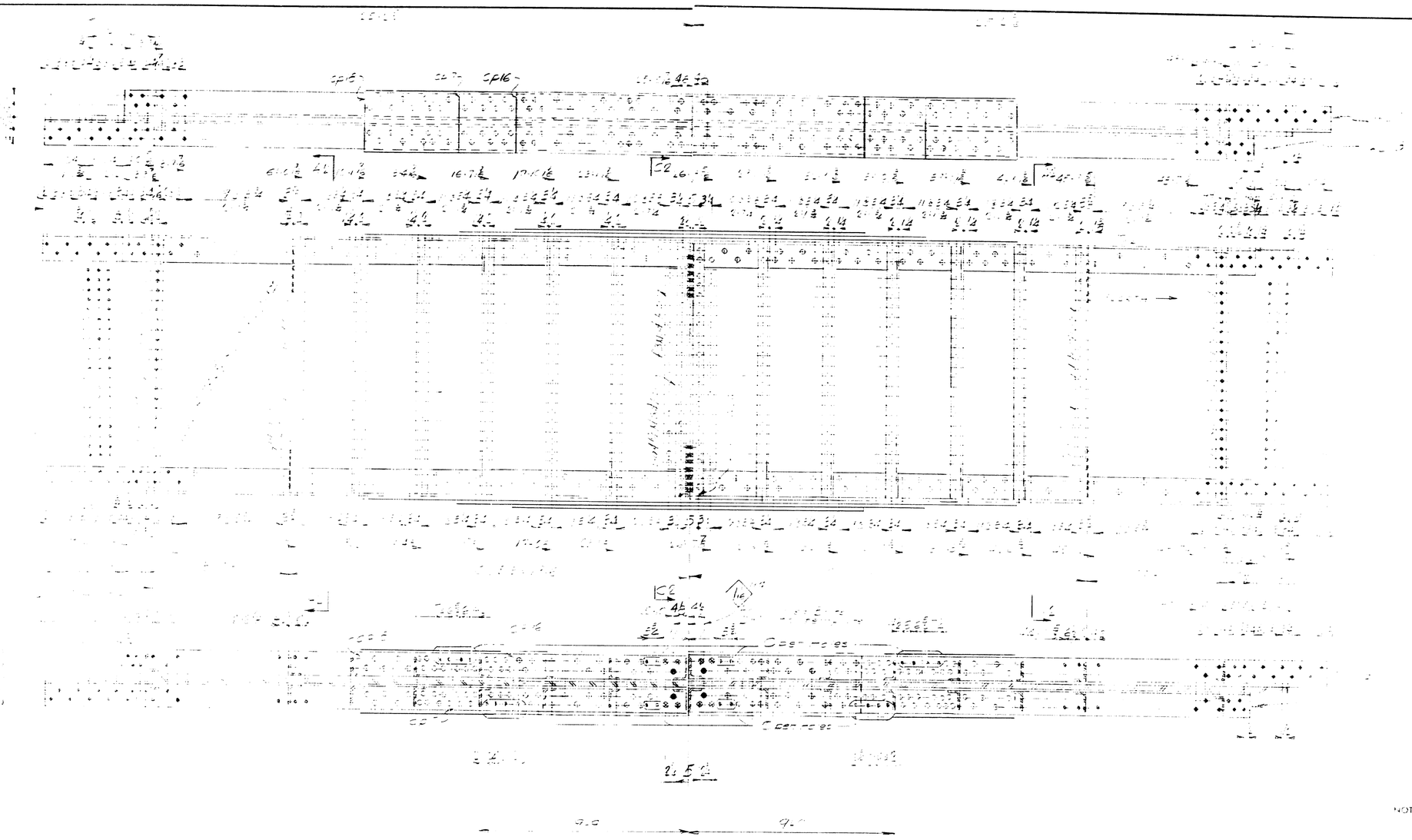
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUNNEL BRIDGE
FRONTAGE, MAINE

DRAWN	9-1-54	[illegible]
REVISION		
REVISION		
REVISION		

CUSTOMER [illegible]
DESIGNER [illegible]
ORDER NO. [illegible] DWG. NO. 8-164-2

76-210



GIRDER G4 E - 1 REQ'D.

For camber diagram see drawing 8-164-D1
For Sections & Details not shown see drawing 8-164-S4
For sizes of material see Bill of Material 8-164-S3

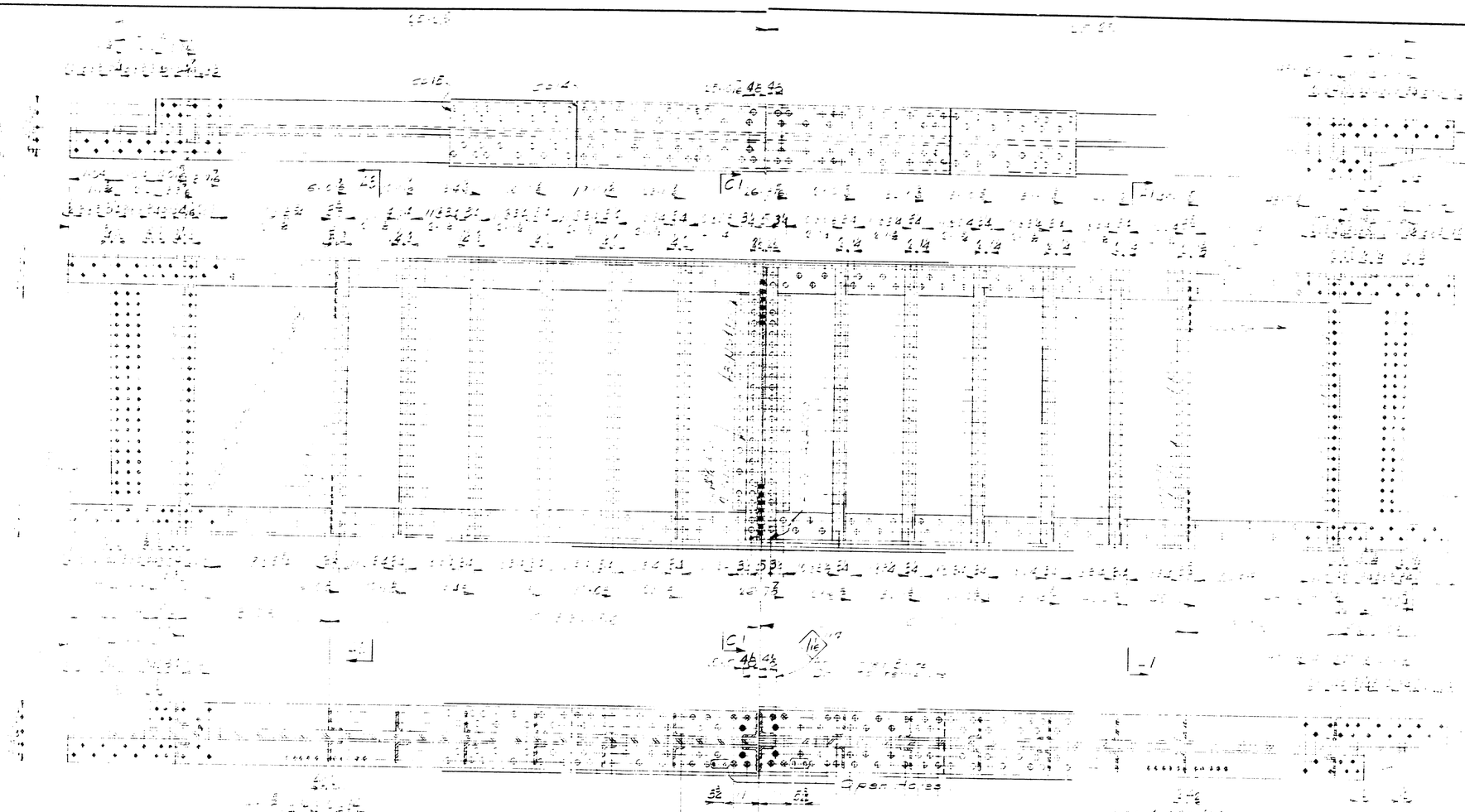
NOTES:

DRAWN		
REVISION		
REVISION		
REVISION		

Bancroft & Martin Rolling Mill Co. company
South Portland, Maine

CUSTOMER
DESIGNER
ORDER NO.
DWG. NO. 8-164

76-211



GIRDER G4 U - 1 REQ'D.

NOTES.

DRAWN	
REVISION	
REVISION	
REVISION	

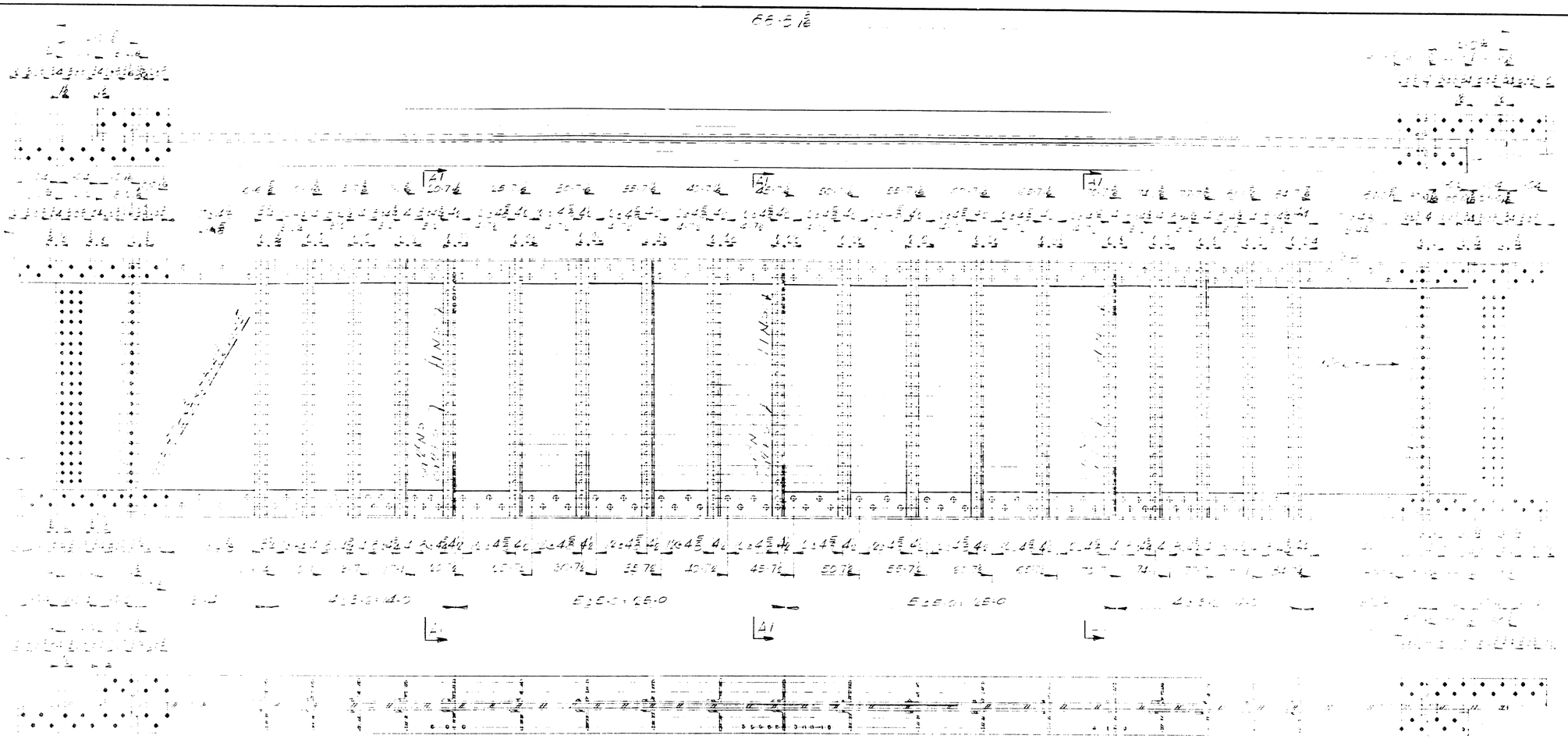
J - GIRDER

Bancroft & Martin Rolling Mills Company
South Portland, Maine

TURNER BRIDGE

CUSTOMER
DESIGNER
ORDER NO.
DWG. NO.

76-212



SEE DETAIL G5A-1 REQ'D

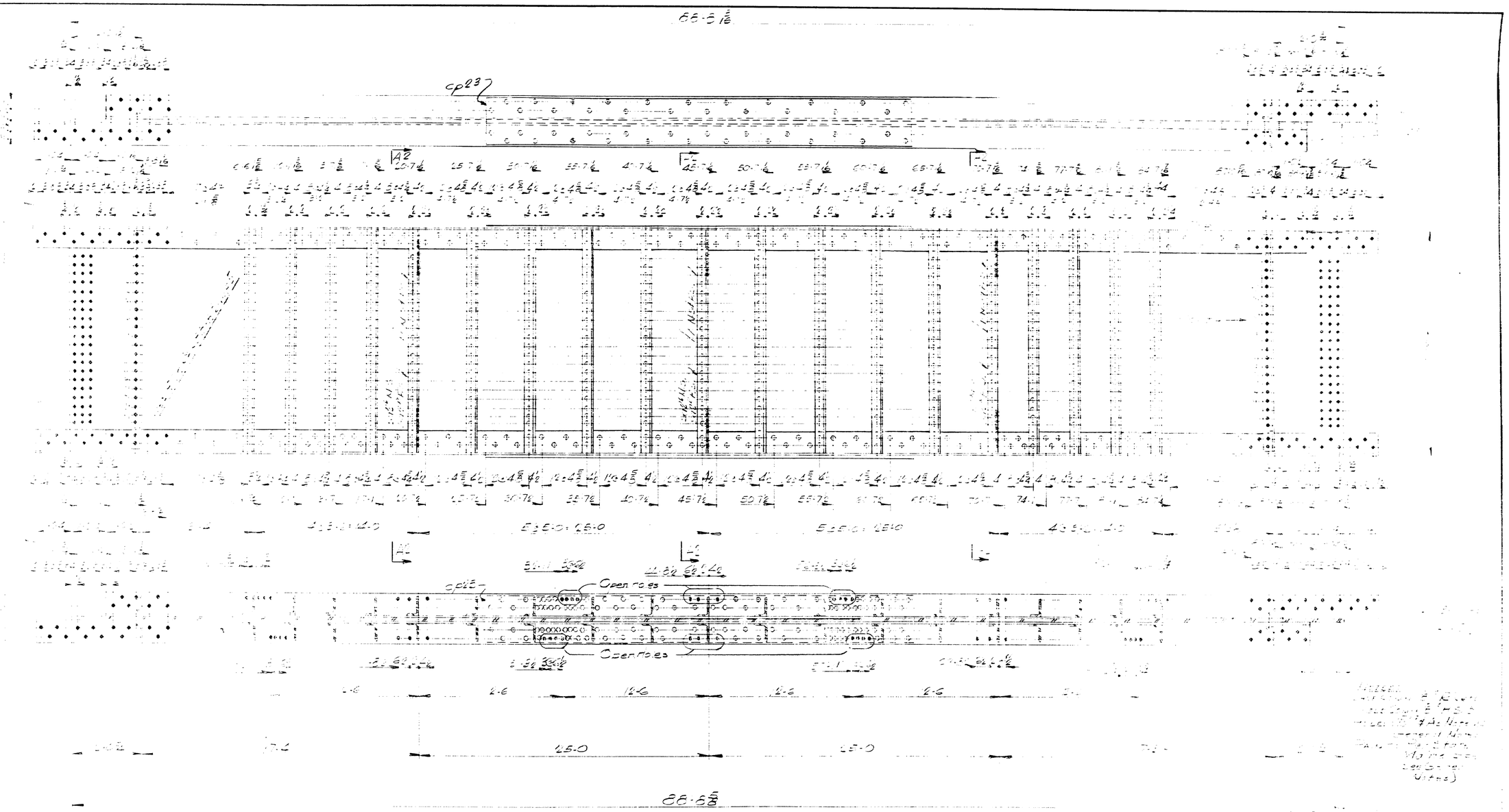
NOTES:
For camber diagram see drawing 8-164-01
For Sections & Details not shown see drawing 8-164-52
For sizes of material see Bill of Material 8-164-S1

DRAWN		
REVISION		
REVISION		
REVISION		

Bancroft & Martin Rollins Wells & Company
South Portland, Maine

CUSTOMER
DESIGNER
ORDER NO.
DWG. NO. 8-164-S

76-213



GIRDER G 5 - 1 REQ'D

For location mark not given see B.S.R. detail sheet 8-164-S45

NOTES:
For camber diagram see drawing 8-164-D1
For SECTIONS & DETAILS not shown see drawing 8-164-S2
For sizes of material see Bill of Material 8-164-S3

DRAWN			
REVISION			
REVISION			
REVISION			

G5 - GIRDER

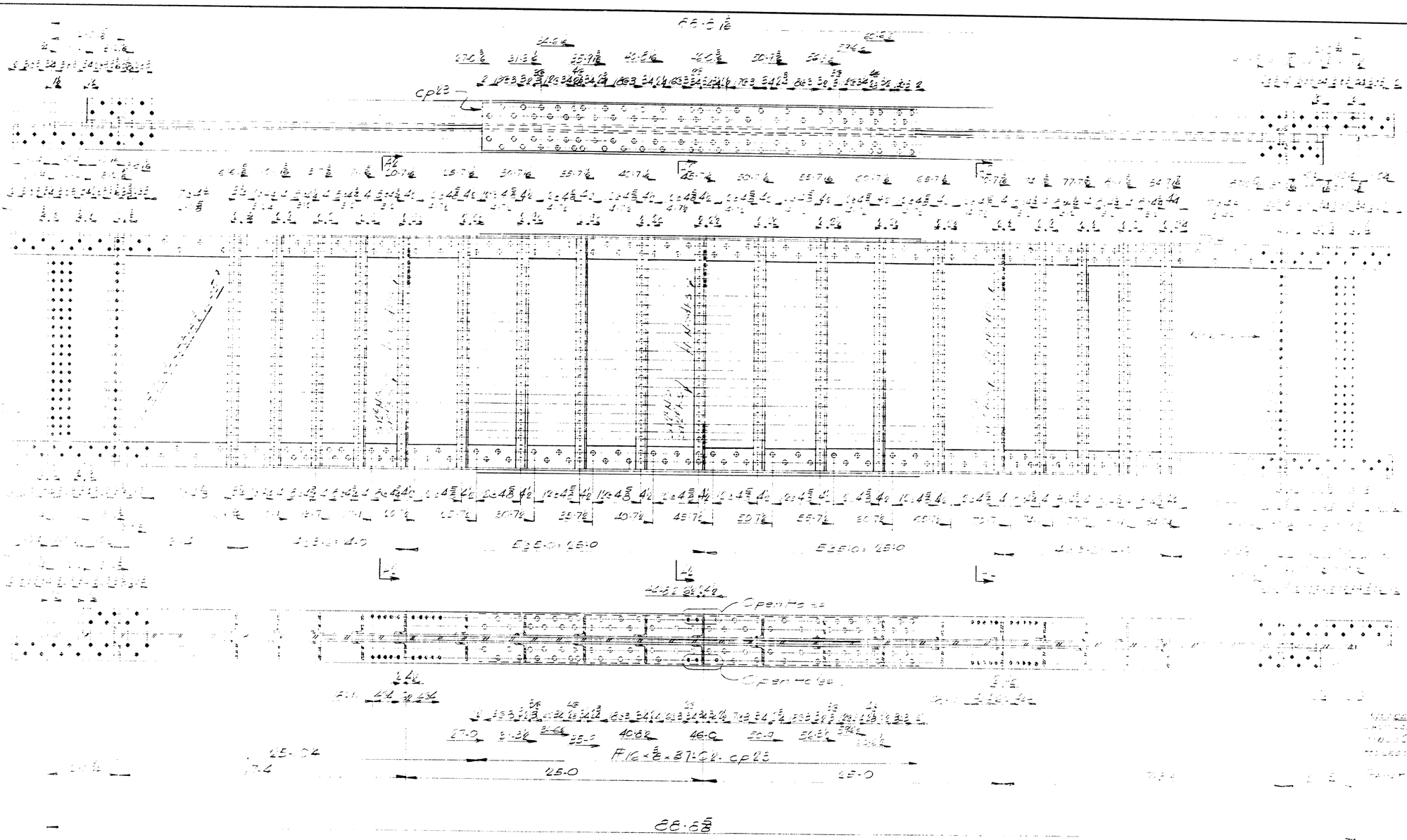
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEY'S BRIDGE
PORTLAND MAINE

CUSTOMER MAINE TURNPIKE AUTH.
DESIGNER MAINE TURNPIKE BRIDGE DEPT.

ORDER NO. [illegible] DWG NO. 8-164-S

76-214



GIRDER G5C-1 REQ'D

NOTES:
For camber diagram see drawing 8-164-01
For SECTIONS & DETAILS not shown see drawing 8-164-S2
For sizes of material see Bill of Material 8-164-S-3

DRAWN	J.	JEF
REVISION		
REVISION		
REVISION		

GIRDER

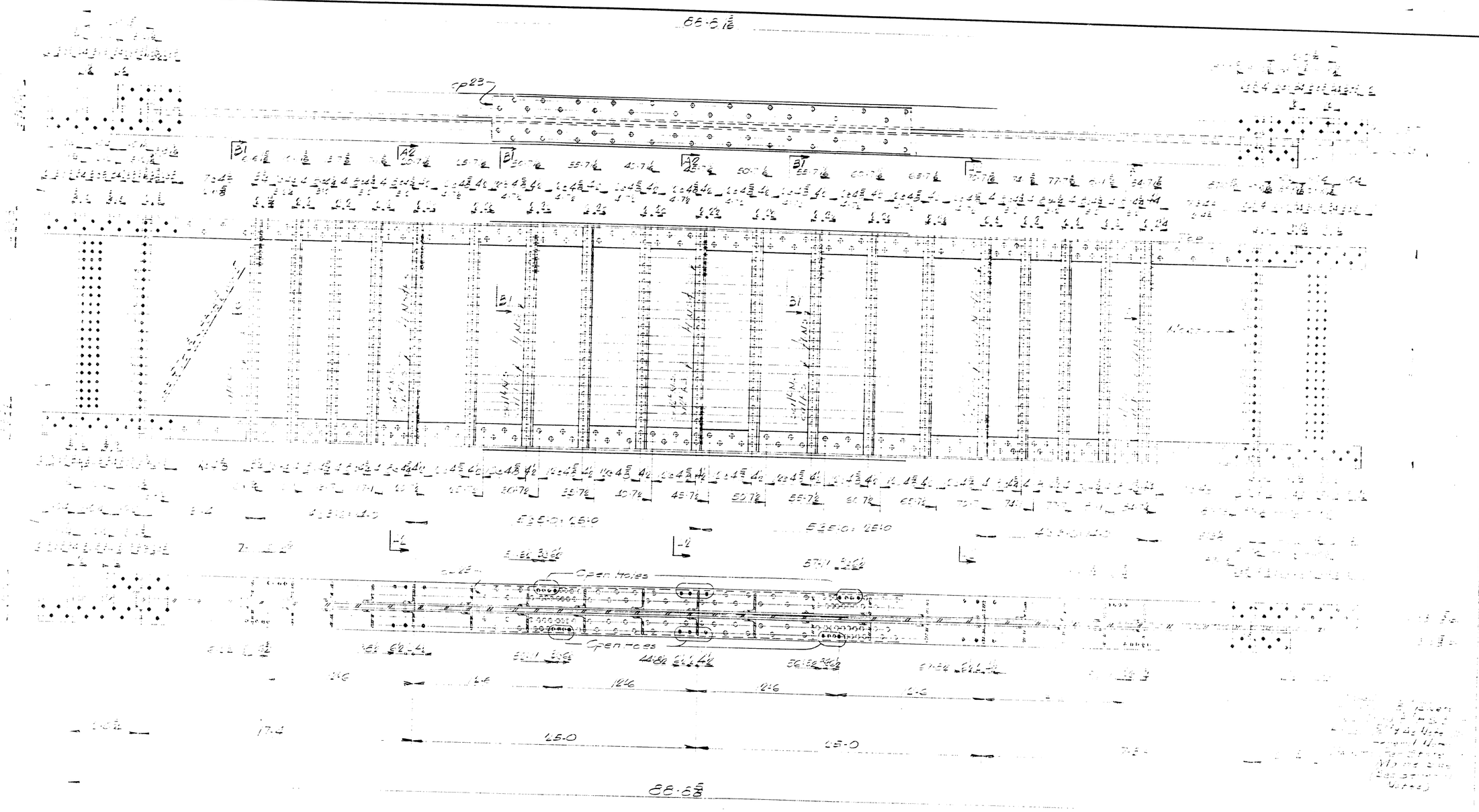
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

T[illegible] BRIDGE
PORTLAND MAINE

CUSTOMER [illegible] FINNAN INC.
DESIGNER [illegible] 4C BRIDGE D.

ORDER NO. [illegible] DWG. NO. 8-164-S

76-215



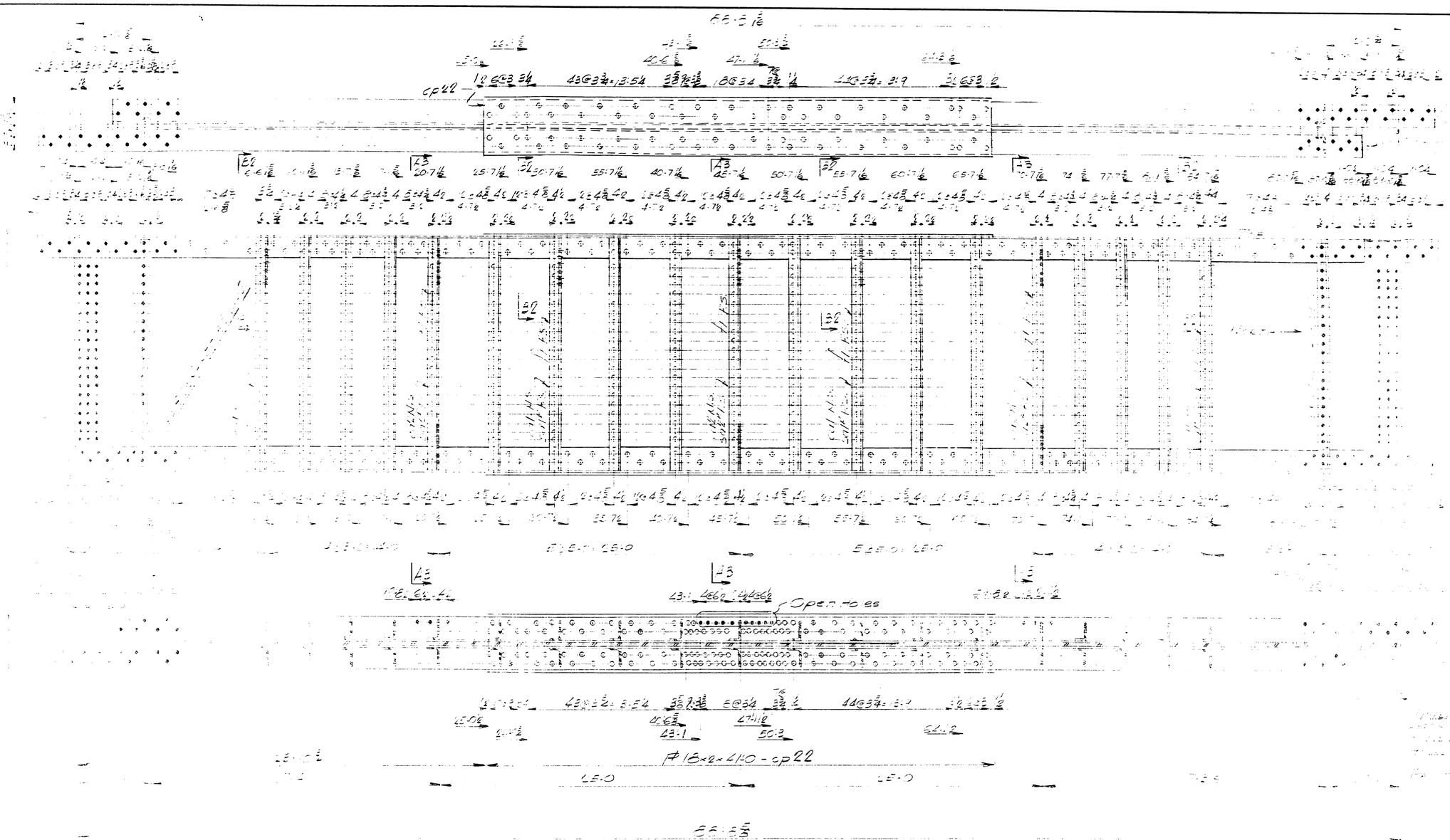
DIRDEE G50-1REG'D

Notes:
For camber diagram see drawing 6-164.01
For Sections & Details not shown see drawing 8-164.52
For sizes of material see Bill of Material 8-164-53

DRAWN		JFF
REVISION		
REVISION		
REVISION		

52' -0" GIRDER
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine
TURNER BRIDGE
PORTLAND MAINE
CUSTOMER
DESIGNER
ORDER NO. DWG NO. 8-164.5

76-216



PLATES GDE-1 REQ'D.

NOTES:
For camber diagram see drawing B-164-01
For Sections & Details not shown see drawing B-164-S2
For sizes of material see Bill of Material B-164-S3

DRAWN		
REVISION		
REVISION		
REVISION		

FOR GENERAL NOTES & SPECIFICATIONS SEE DWG. B-164-S1

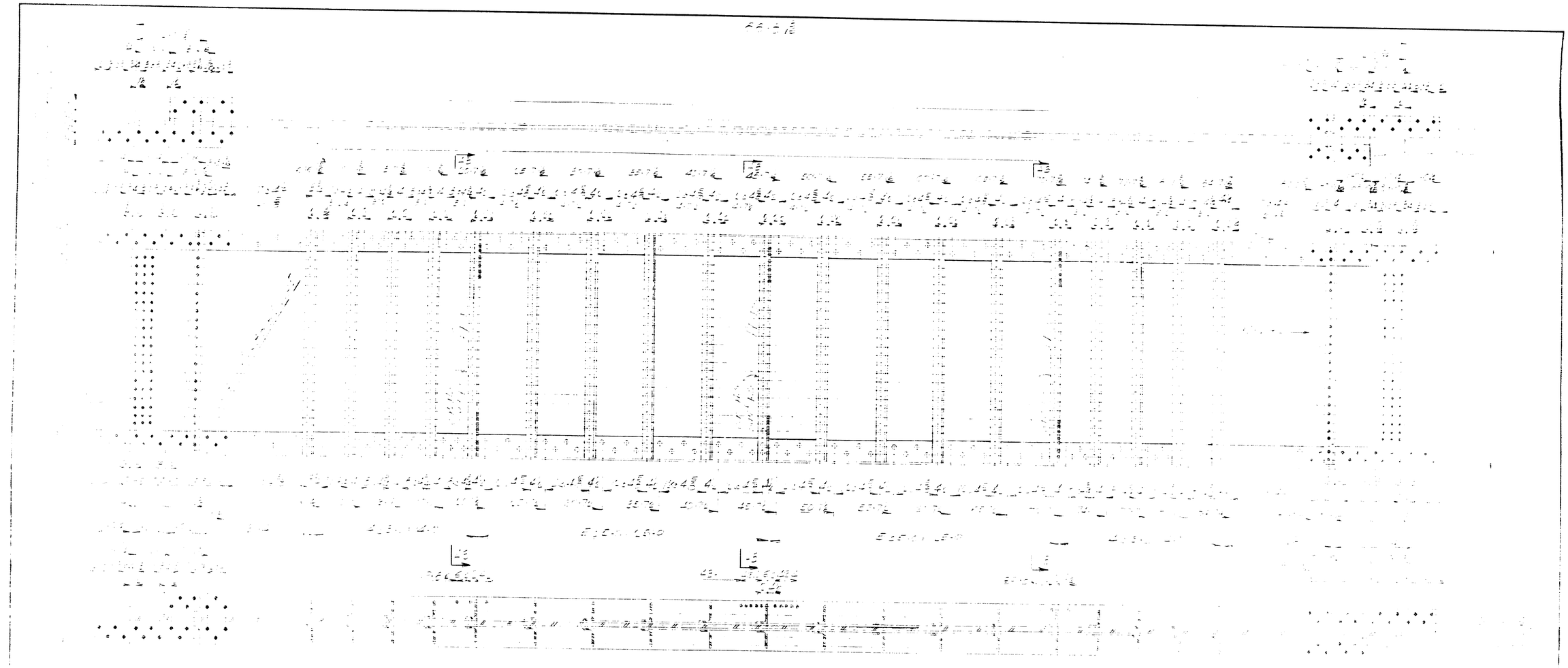
FABRICATED BY
Bancroft & Martin Rolling Mills Comp.
South Portland 7, Maine

TOLEDO BRIDGE
PENOBSCOT, MAINE

CUSTOMER Me. - Finnian Inc.
DESIGNER Maine - Me. Bridge Div.

ORDER NO. [illegible] DWG. NO. B-164-S

76-217



GIRDER G2F-1 REQ'D

Notes:
For camber diagram see drawing B-164-D1
For Sections & Details not shown see drawing B-164-S2
For sizes of material see Bill of Material B-164-S3

DRAWN		
REVISION		
REVISION		
REVISION		

ISSUED

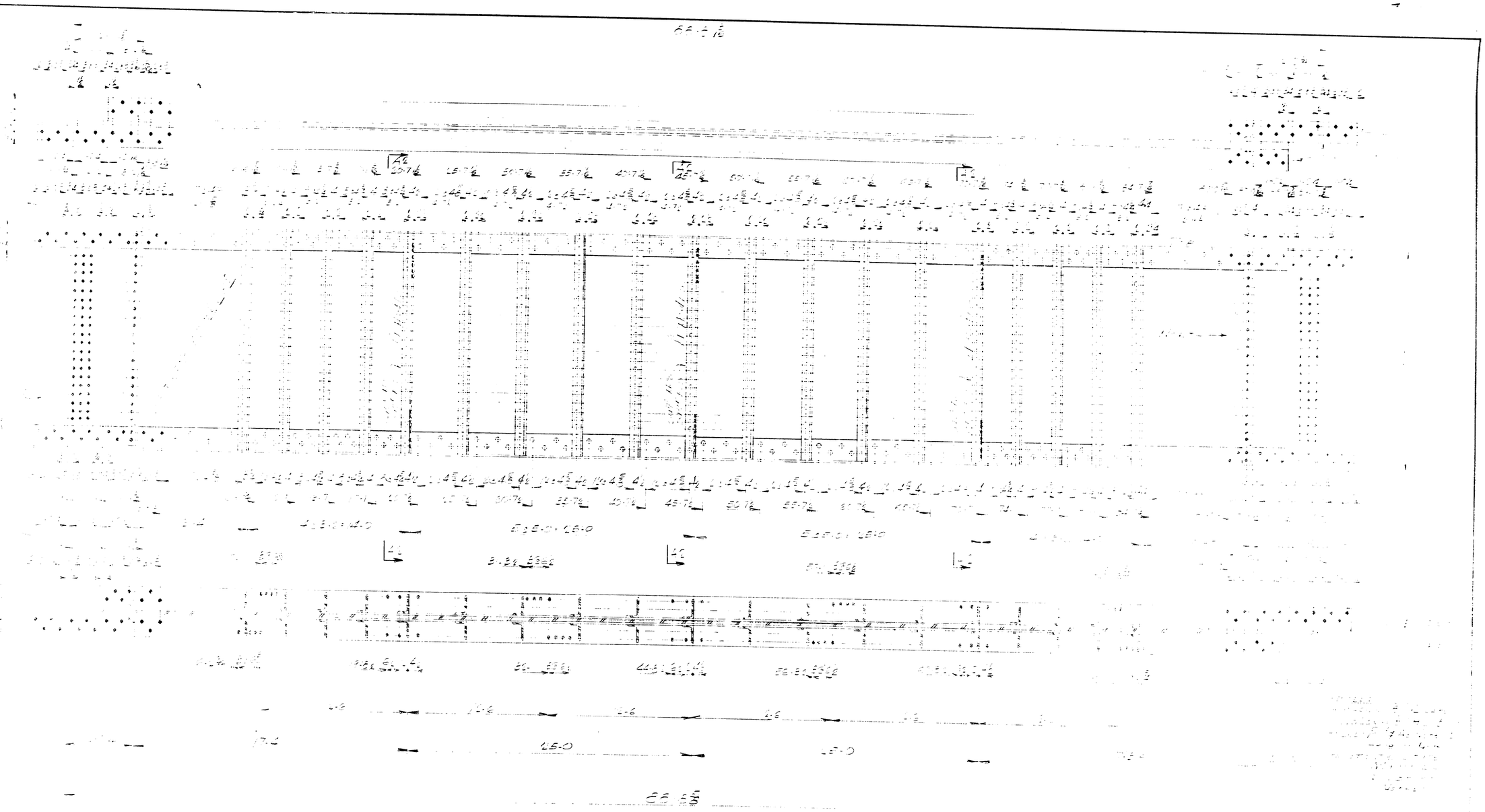
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TWELFTH AVENUE BRIDGE
ELEVATION

CUSTOMER [illegible] MARTIN INC.
DESIGNER [illegible] PEIRCE DIV.

ORDER NO. [illegible] DWG. NO. B-164S

76-218



GIRDER G5G-1 REQ'D

NOTES:
For camber diagram see drawing S-164.01
For SECTIONS & DETAILS not shown see drawing S-164.52
For sizes of material see Bill of Material on drawing S-164.51

DRAWN			
REVISION			
REVISION			
REVISION			

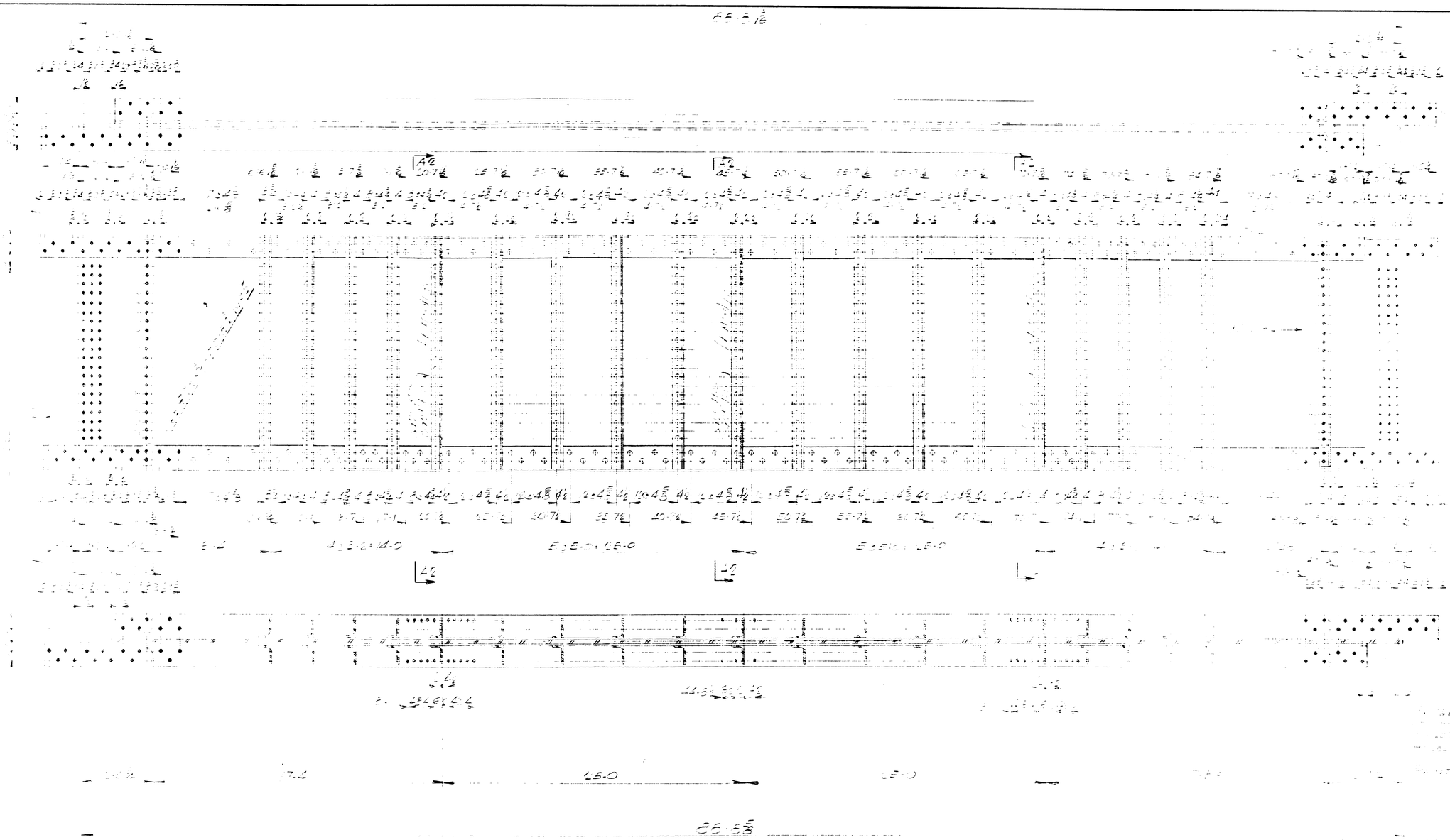
GIRDER

Bancroft & Martin Welding Works Company
South Portland 7, Maine

CUSTOMER
DESIGNER

ORDER NO. 12684 DWG. NO. S-164.02

76-219



GIRDER G5 - 1 REQ'D

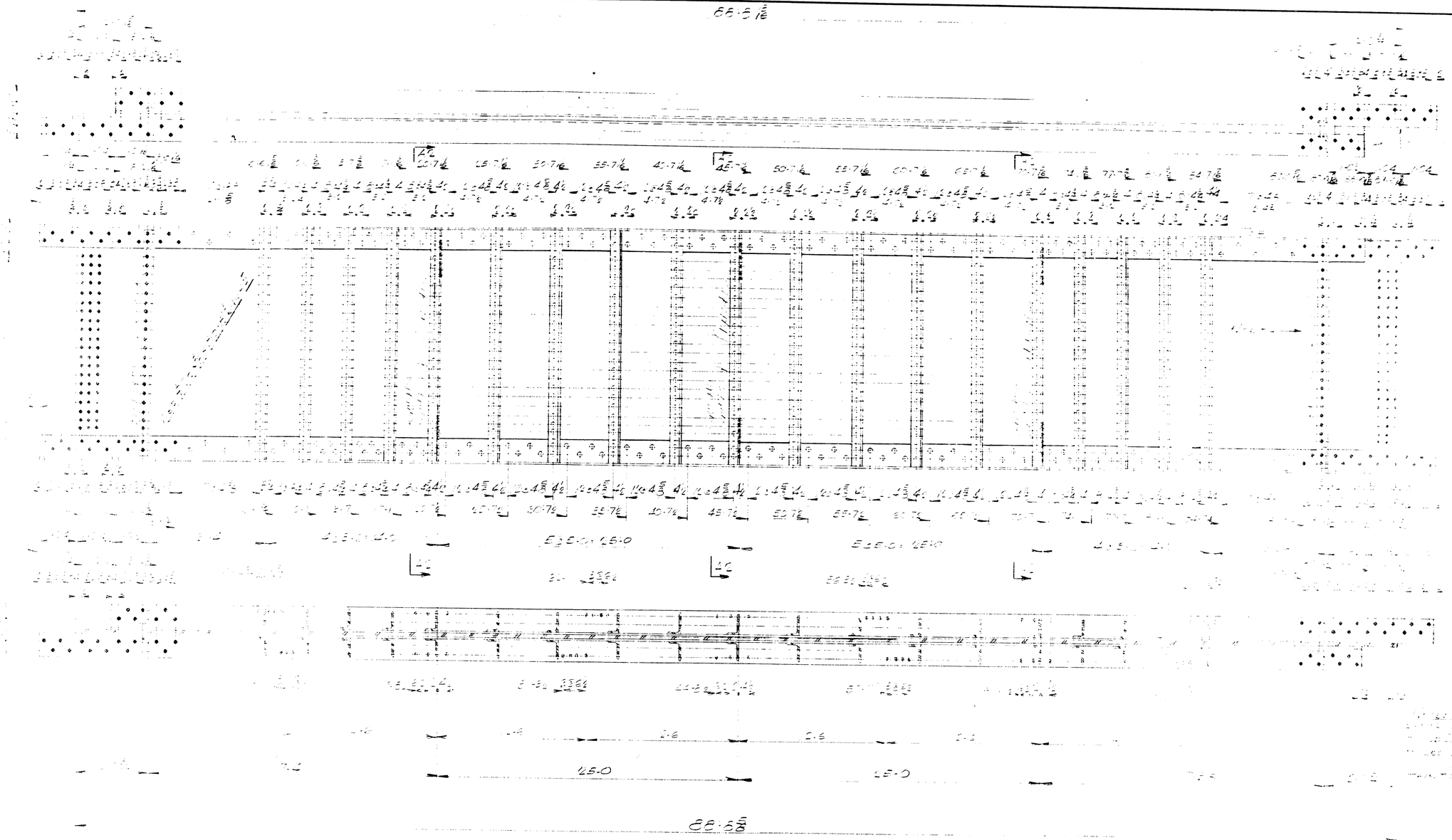
NOTES:
For camber diagram see drawing B-164-01
For SECTIONS & DETAILS not shown see drawing B-164-52
For sizes of material see Bill of Material B-164-S1

DRAWN			
REVISION			
REVISION			
REVISION			

Bancroft & Martin Welding Artist Engineers
South Portland 7, Maine

CUSTOMER
DESIGNED
ORDER NO.
DWG. NO. B-164-3

76-220



GIRDER G5I-1 REQ'D

NOTES:
For camber diagram see drawing 8-164.01
For Sections & Details not shown see
drawing 8-164.52
For sizes of material see Bill of Material 8-164-S-1

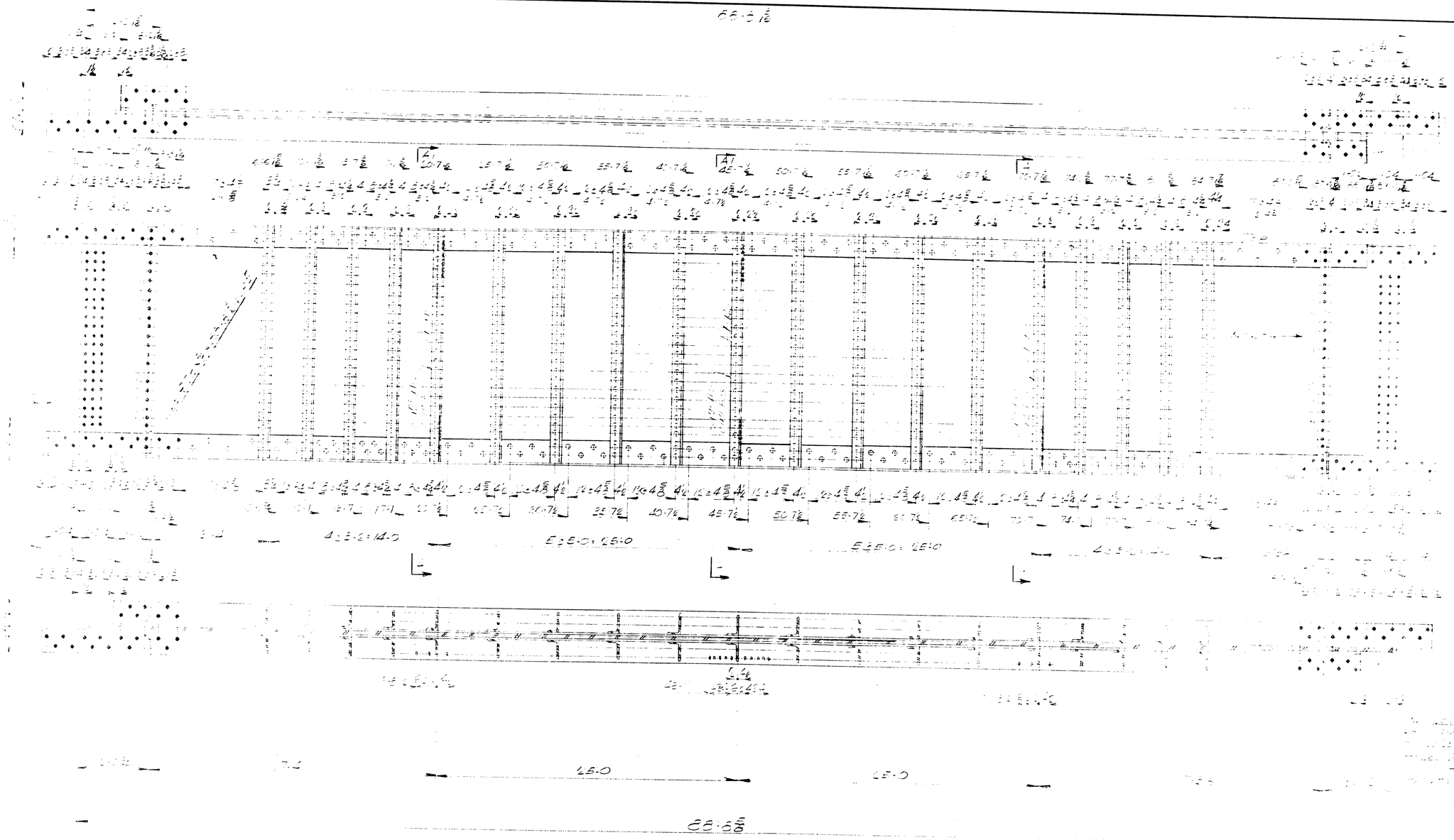
GIRDER

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

DRAWN		JPF
REVISION		
REVISION		
REVISION		

CUSTOMER
DESIGNER
ORDER NO. LEBBAL DWG. NO. 8-164-S

76-221



GIRDER G5J-1 REQ'D

NOTES:
For camber diagram see drawing 8-164-D1
For Sections & Details not shown see drawing 8-164-S2
For sizes of material see Bill of Material 8-164-S3

DRAWN	T. CB	JFF	
REVISION			
REVISION			
REVISION			

GIRDER

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TURNER BRIDGE
PORTLAND MAINE

CUSTOMER [illegible] HANSON INC.
DESIGNER [illegible] & HARRIS DIV.

ORDER NO. [illegible] DWG. NO. 8-164-S

76-222

GIRDER G54 - 1 REQD.

NOTES

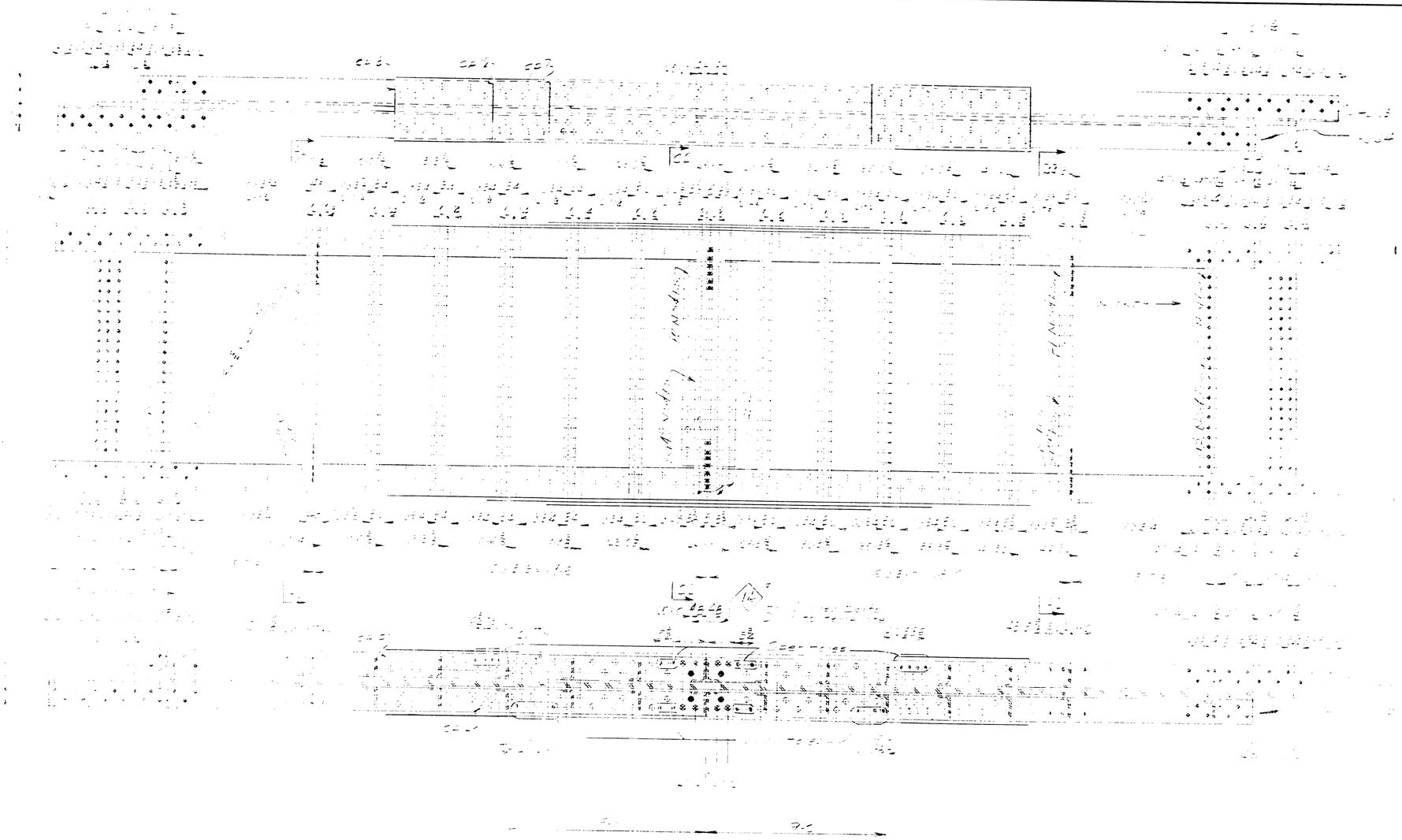
For camber diagram see drawing S-164-01
For Sections & Details not shown see drawing S-164-51
For sizes of material see Bill of Materials S-164 SE3

DRAWN	8-7-58	
REVISION		
REVISION		
REVISION		

Bancroft & Easton Welding Mch'y & Engrs.
South Portland, Maine

CUSTOMER
DESIGNER
ORDER NO. DWG. NO.

76-223



GIRDER MARK-1 REQD.

NOTES

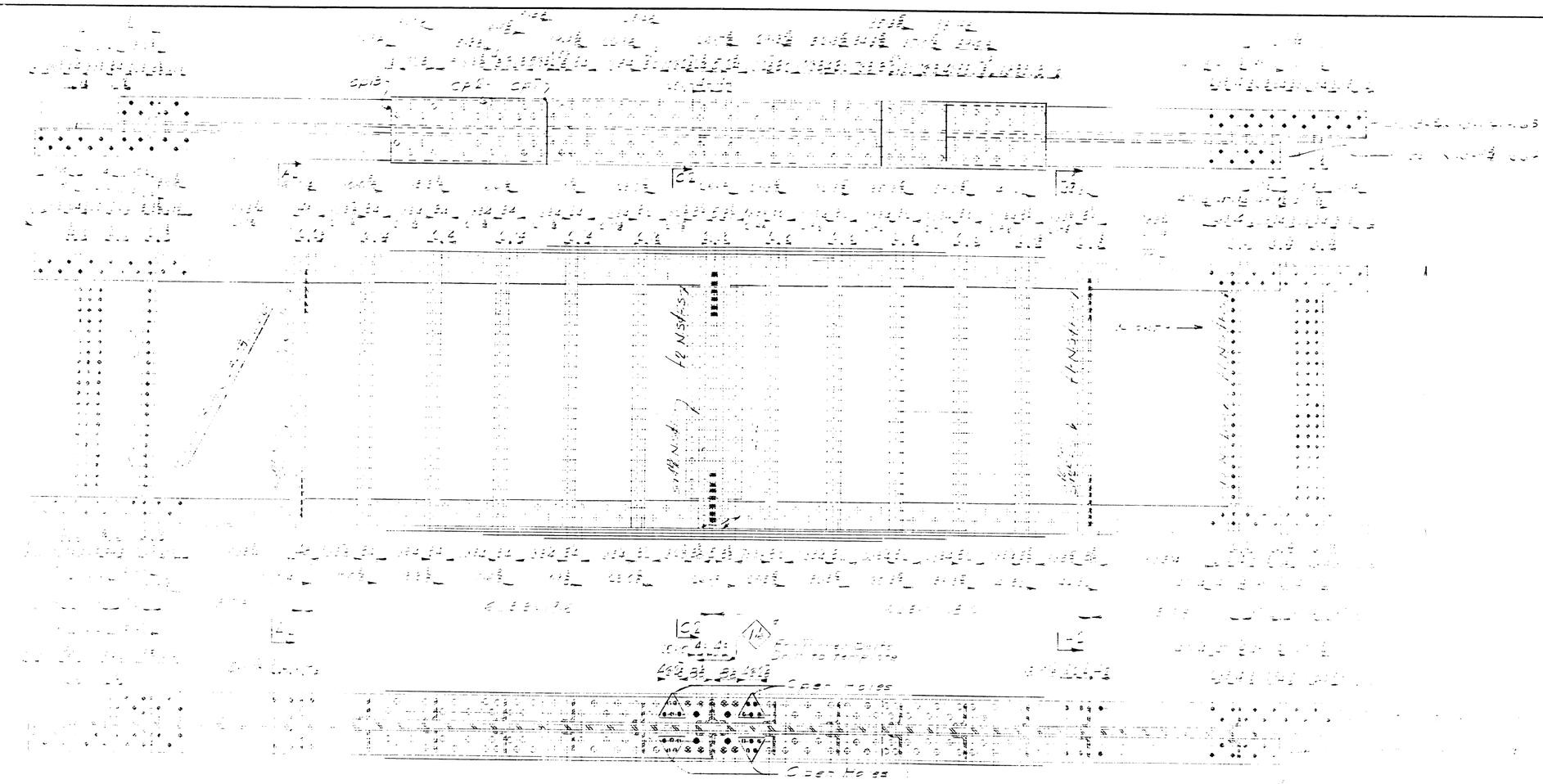
For camber diagram see drawing B-164.01
For Sections & Details not shown see drawing B-164.32
For sizes of material see Bill of Materials B-164.SF3

DRAWN		
REVISION		
REVISION		
REVISION		

Bancroft & Martin Rolling Mills Company
South Portland, Maine

CUSTOMER
DESIGNER
ORDER NO.
DWG. NO. B-164.3

76-224



GIRDER No C-1 REQ'D.

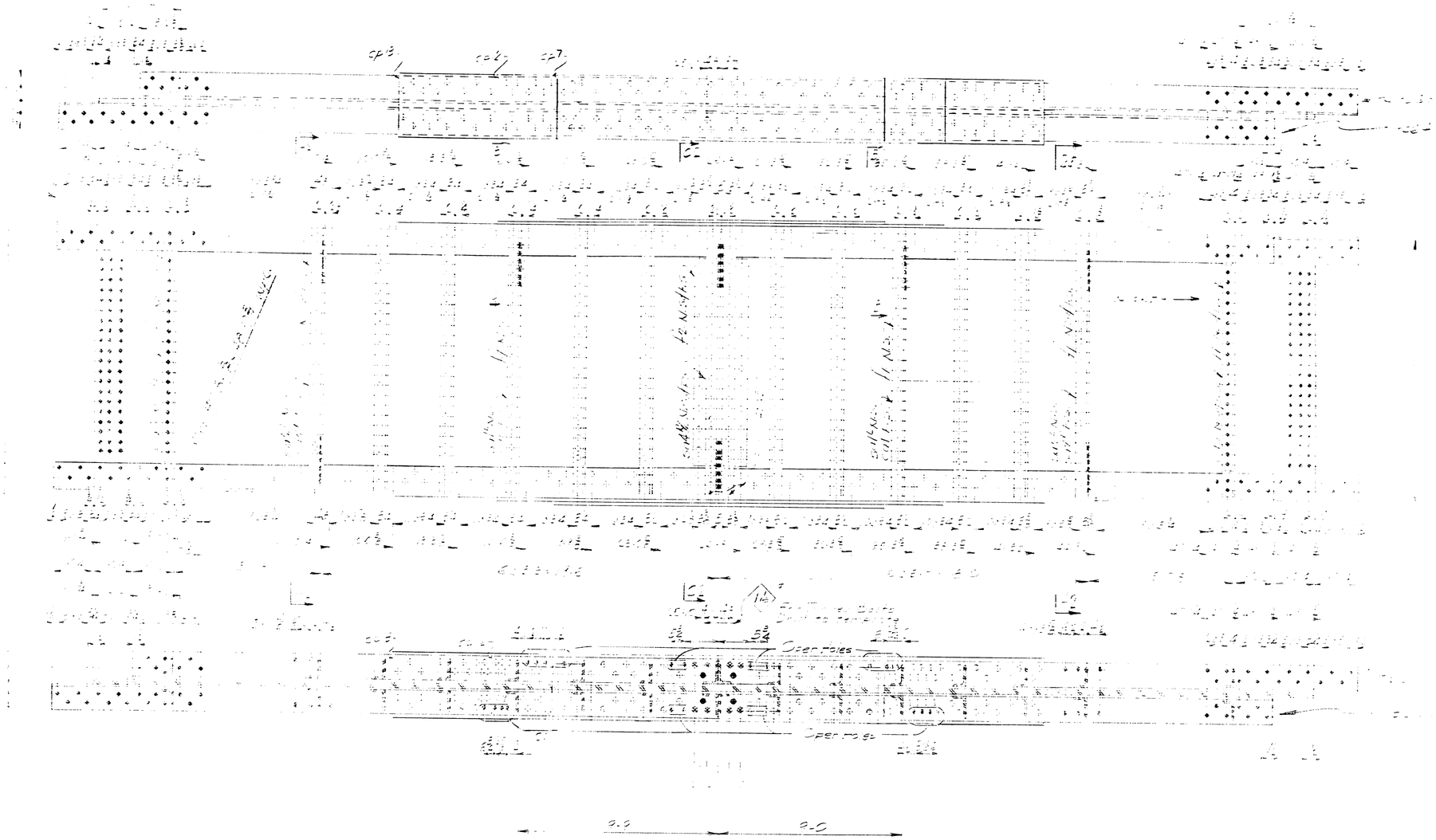
Notes
For camber diagram see drawing S-164.01
For Details not shown see drawing S-164.52
For sizes of material see Bill of Material S-164.51

DRAWN		
REVISION		
REVISION		
REVISION		

Bancroft & Martin Rolling Mills Company
South Portland, Maine

CUSTOMER
DESIGNER
ORDER NO.
DWG. NO. S-164-5

76-225



GIRDER G5 E - 1 REQD.

NOTES

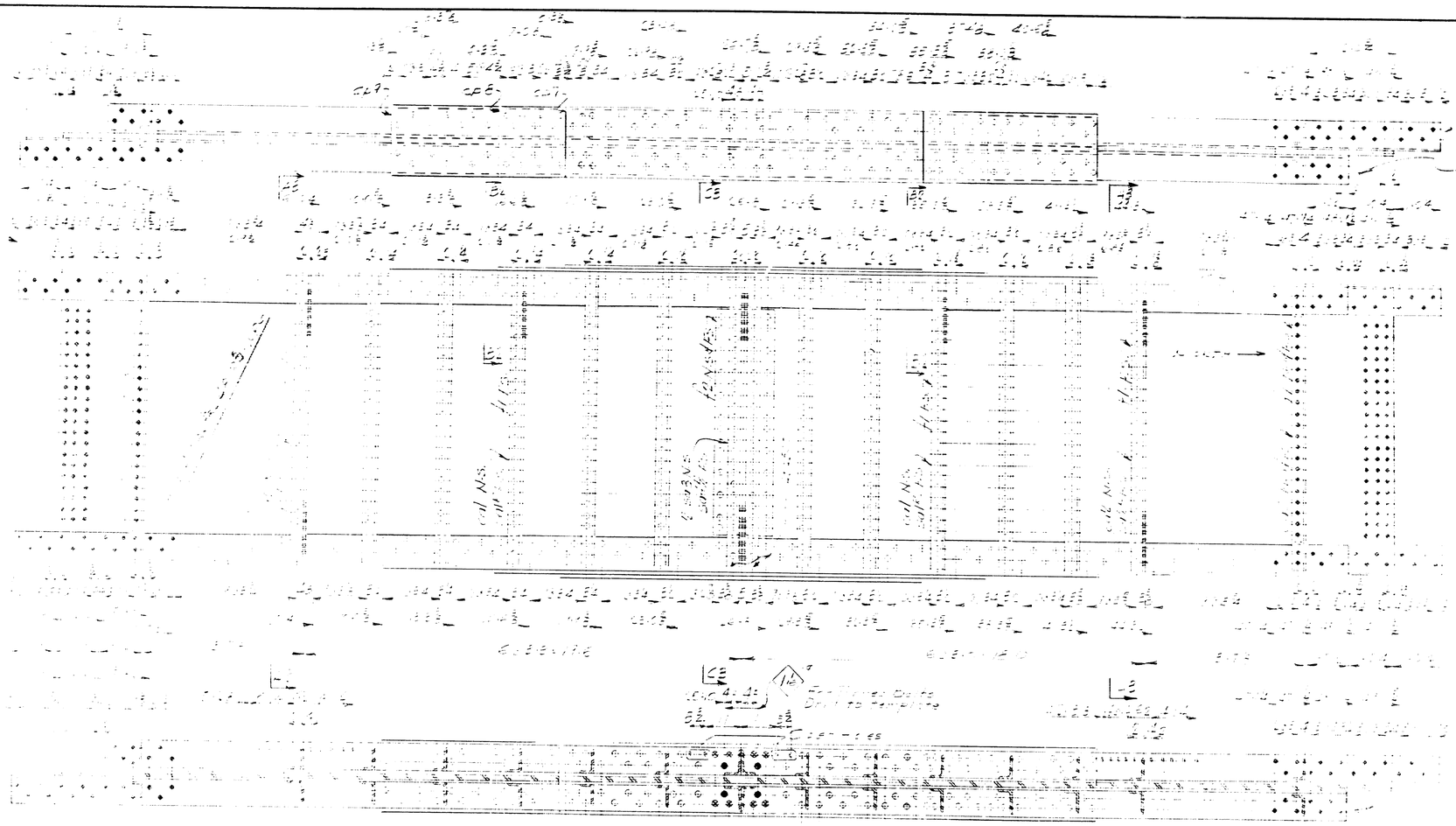
For camber diagram see drawing B-164-01
For SECTIONS & DETAILS not shown see Drawing B-164-52
For sizes of material see Bill of Material B-164-53

DRAWN			
REVISION			
REVISION			
REVISION			

Bancroft & Martin Rollins Welbst Company
South Portland, Maine

CUSTOMER
DESIGNED
ORDER NO. DWG. NO. B-164-2

76-226



GIRDER SPLICE - 1 REQ'D.

Notes

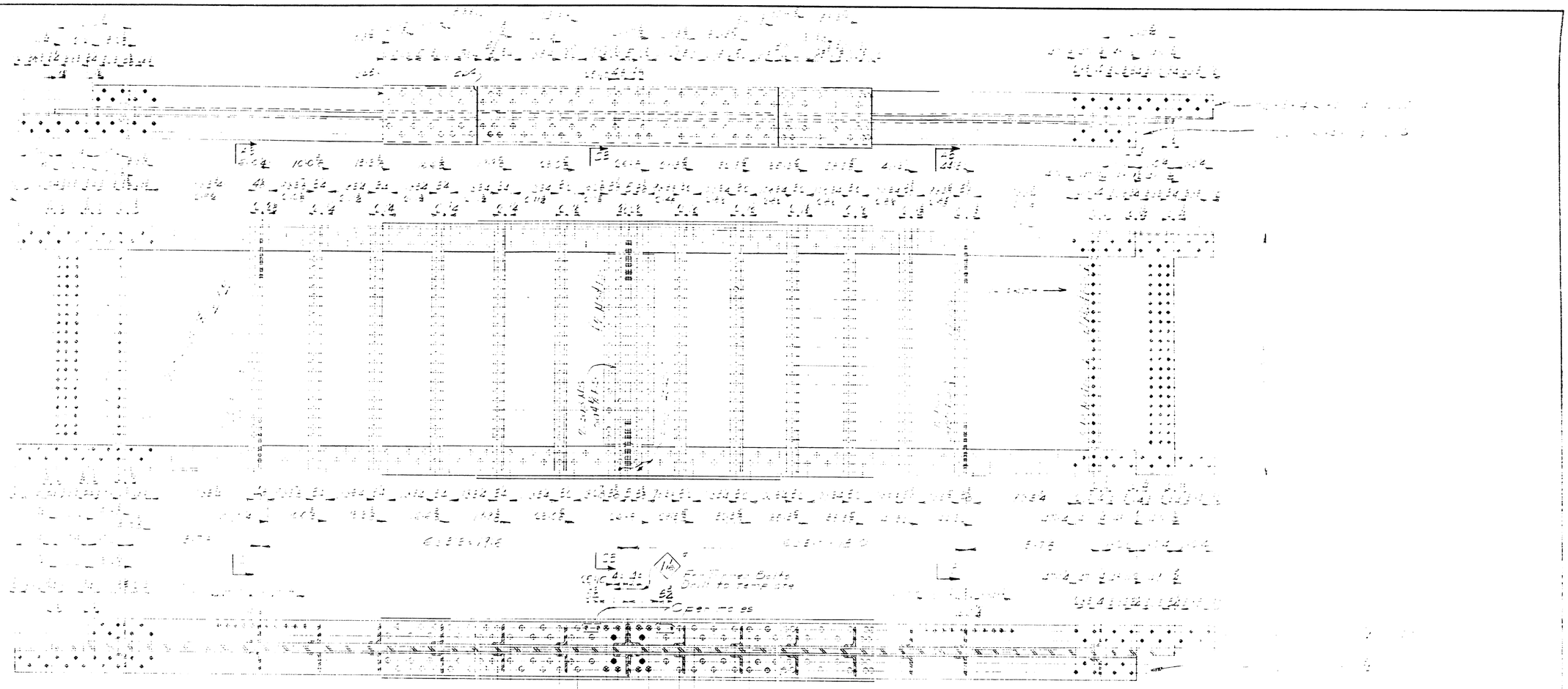
For camber diagram see drawing B-164.01
For Sections & Details not shown see
Drawing B-164.51
For sizes of material see Bill of Material B-164.SB3

DRAWN		
REVISION		
REVISION		
REVISION		

Bancroft & Martin Rolling Mill Company
South Portland, Maine

CUSTOMER
DESIGNER
ORDER NO. DWG. NO. B-164.07

76-227



GIRDER G6 - 1 REQ'D.

NOTES

For camber diagram see drawing 8-164.01
For Sections & Details not shown see drawing 8-164.02
For sizes of material see Bill of Materials 8-164.SB3

Bancroft & Martin Rollins Wolfe Company
South Portland, Maine

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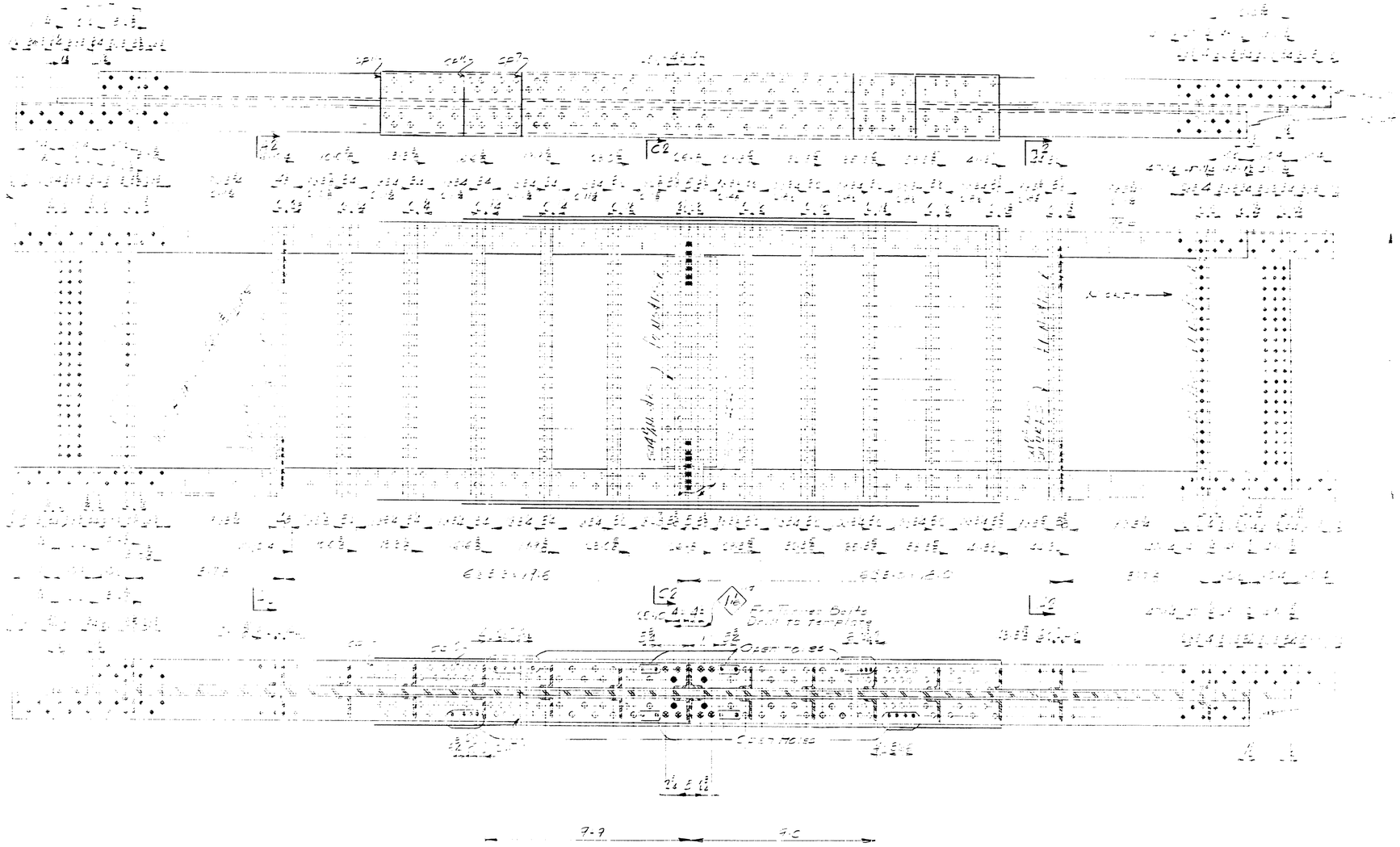
REVISION			

CUSTOMER
DESIGNER

ORDER NO. | DWG. NO. 8-164

76-228



GIRDER G6C - 1 REQ'D.

For camber diagram see drawing 8-164-D1 see Detail sheet 8-164 SEC

NOTES

For camber diagram see drawing 8-164-D1
For SECTIONS & DETAILS not shown see drawing 8-164-S2
For sizes of material see Bill of Material 8-164-SE3

NOTES

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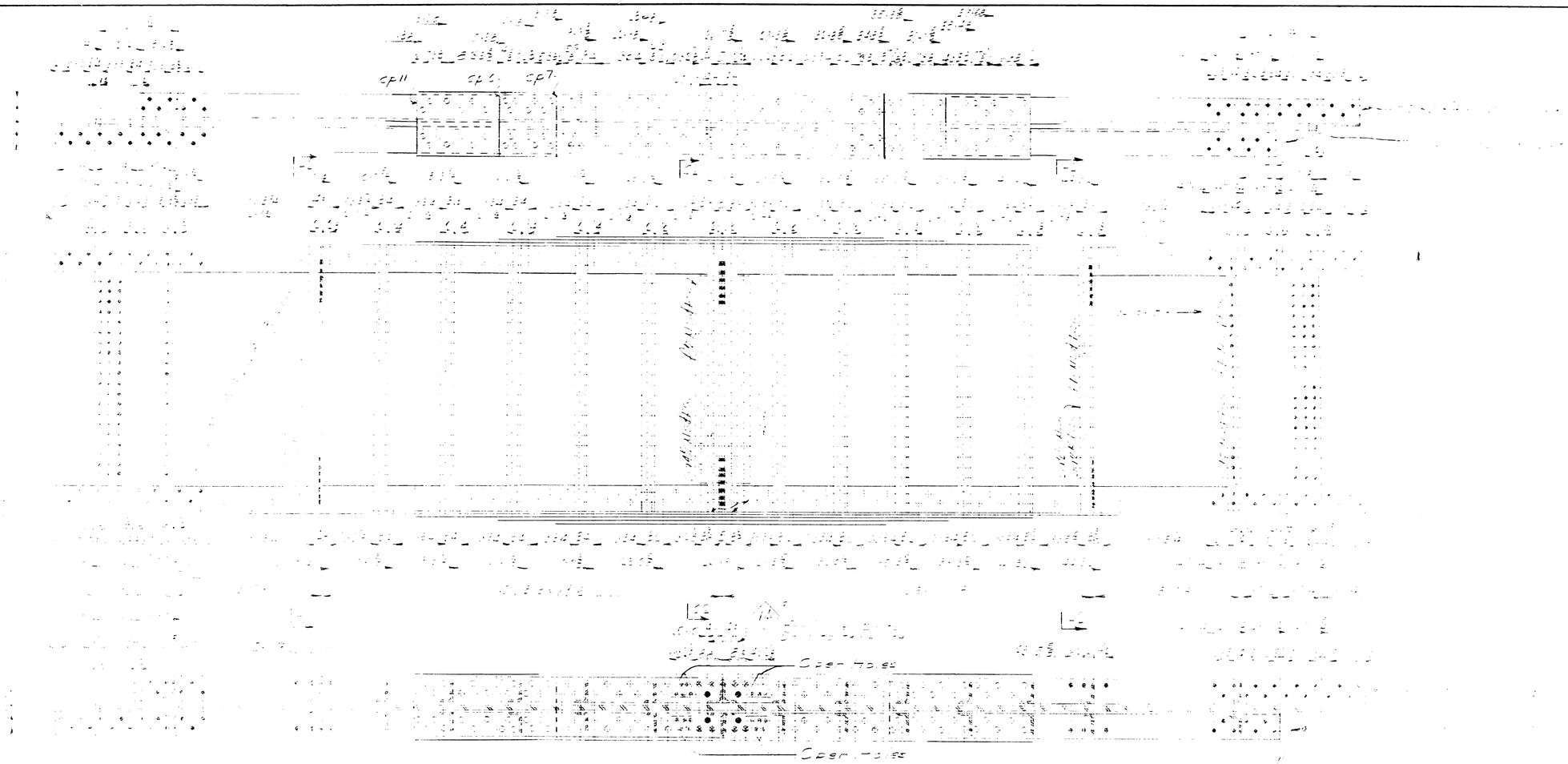
REVISION			
REVISION			

Bancroft & Martin Rolling Mills Company
South Portland, Maine

CUSTOMER
DESIGNED
ORDER NO
DWG NO

76-229



GIRDER SET - 1 REQ'D.

NOTES

For camber diagram see drawing B-164.01
For beam and details not shown see drawing No. B-164.02
For piles at main pier see Bill of Materials B-164.03B

NOTES

Bancroft & Martin Building Mills Company
South Portland, Maine

DRAWN			
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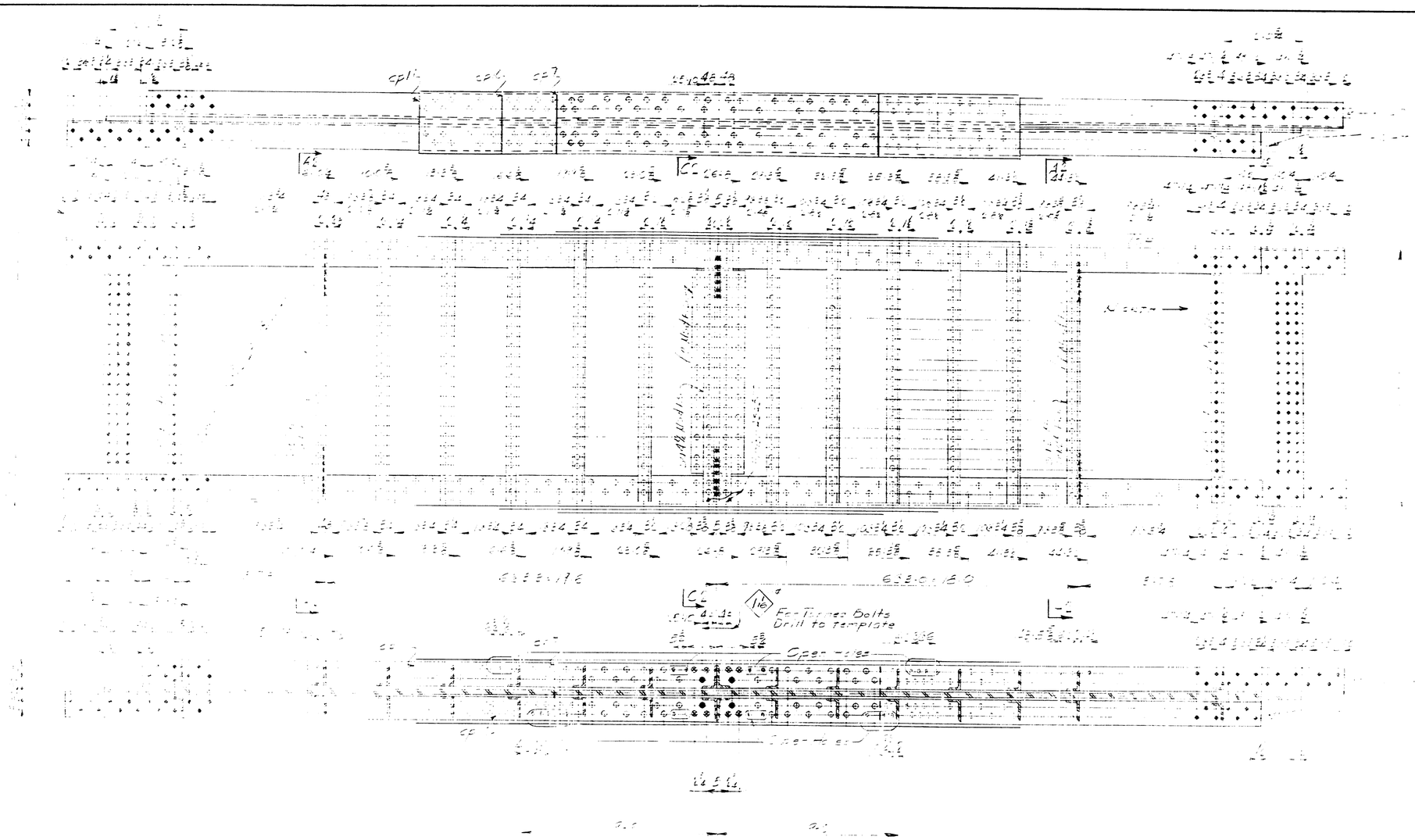
REVISION			
REVISION			

CUSTOMER
DESIGNER
ORDER NO. | DWG. NO. B-164.3

76-230



GIRDER EGI - 1 REQ'D.

Notes

For camber diagram see drawing 8-164-D1
For SECTIONS & DETAILS not shown see drawing 8-164-S2
For sizes of material see Bill of Material 8-164 SE3

NOTES:

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUNNEL BRIDGE
PORTLAND, MAINE

CUSTOMER [illegible]
DESIGNER [illegible]

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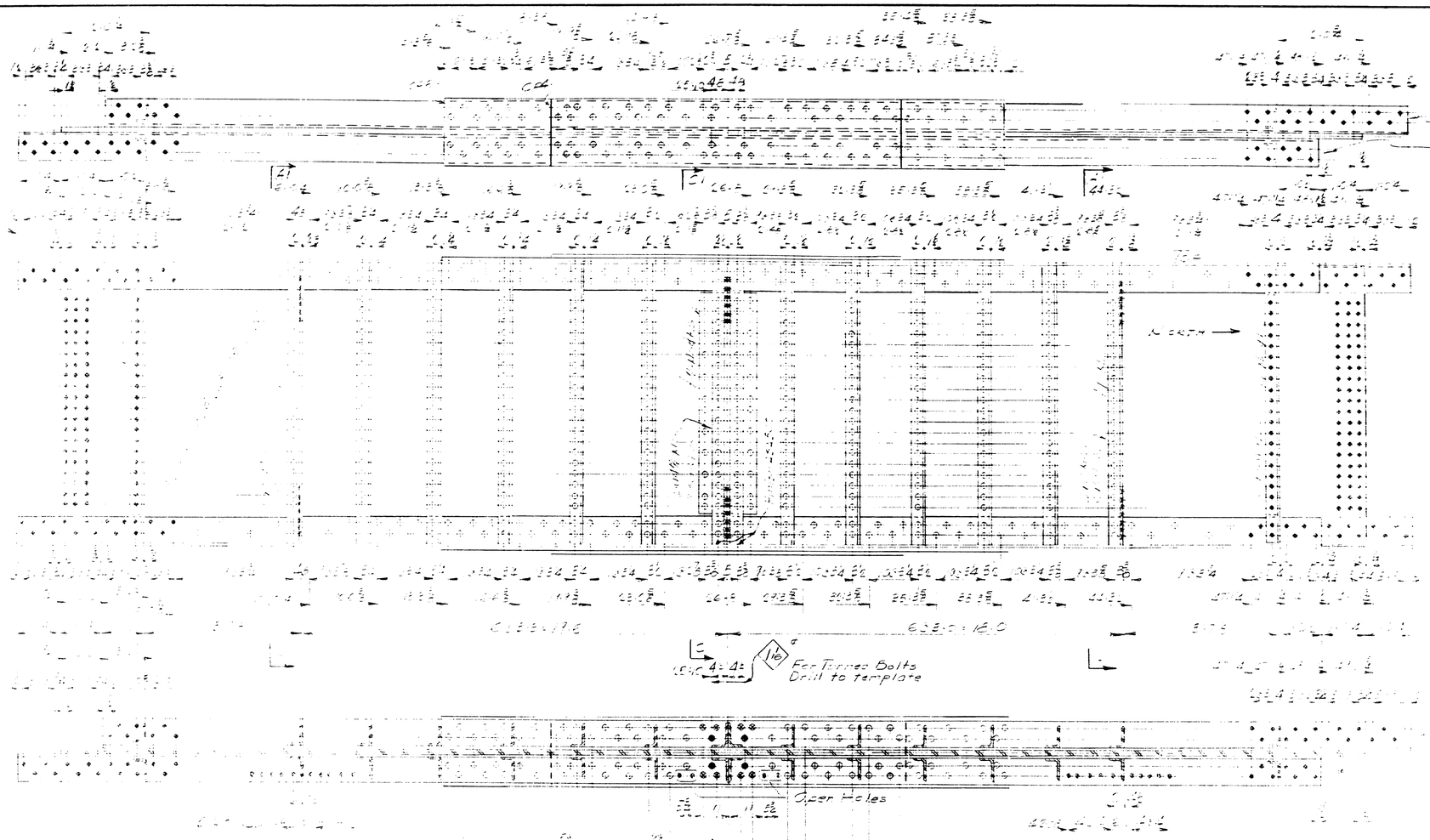
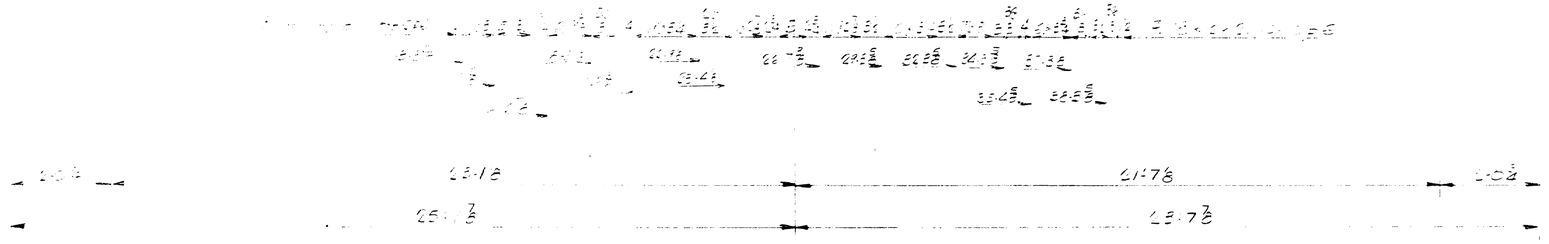
REVISION		
REVISION		
REVISION		

ORDER NO. [illegible] DWG. NO. 8-164 S [illegible]

76-231





GIRDER SEC'N - 1 REQ'D.

NOTES

For camber diagram see drawing 8-164-D1
For SECTIONS & DETAILS not shown see drawing 8-164-S2
For sizes of material see Bill of Material 8-164-SE3

NOTES:

DRAWN	[illegible]	[illegible]	
REVISION			
REVISION			
REVISION			

[illegible]

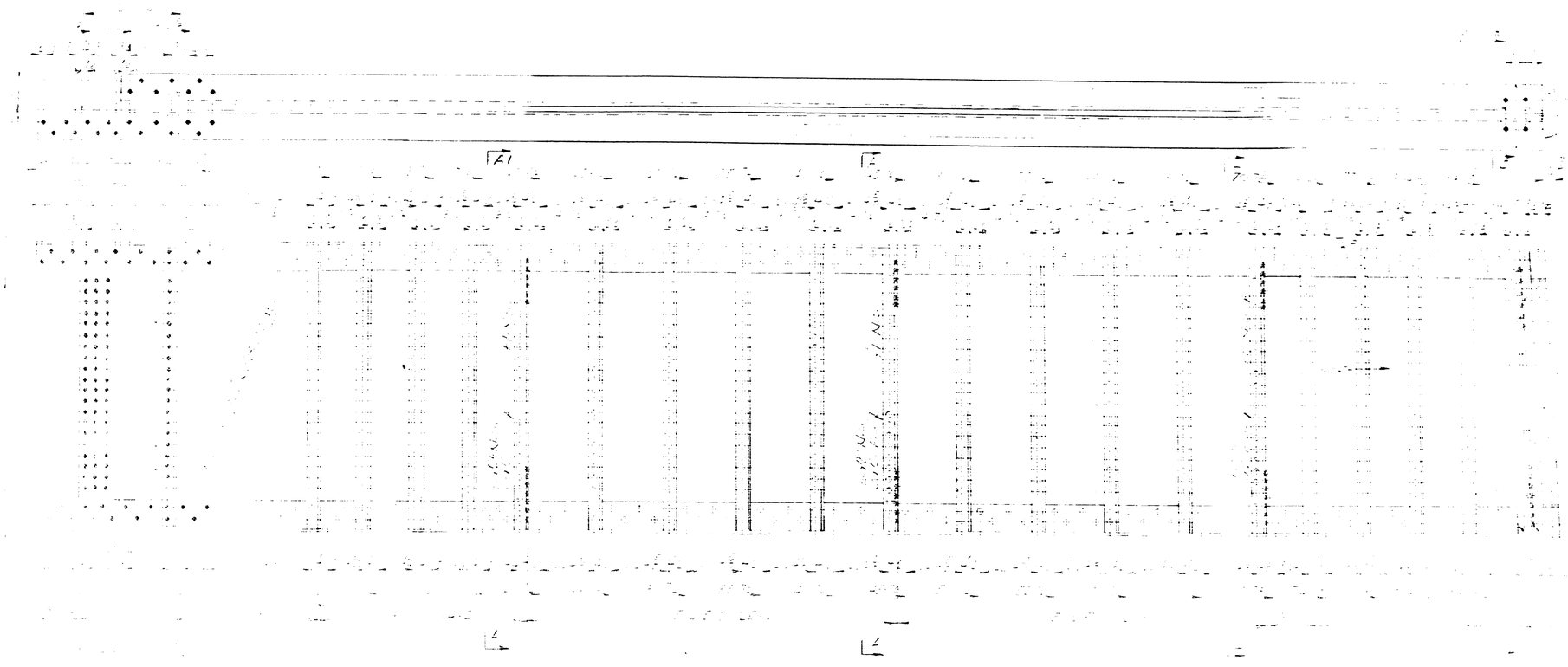
Bancroft & Martin Rolling Mills Co. Company
South Portland 7, Maine

TUKEY'S BRIDGE
PORTLAND, MAINE

CUSTOMER [illegible]
DESIGNER MAINE STATE BRIDGE DIV.

ORDER NO. [illegible] DWG. NO. 8-164-S

76-232



NOTES

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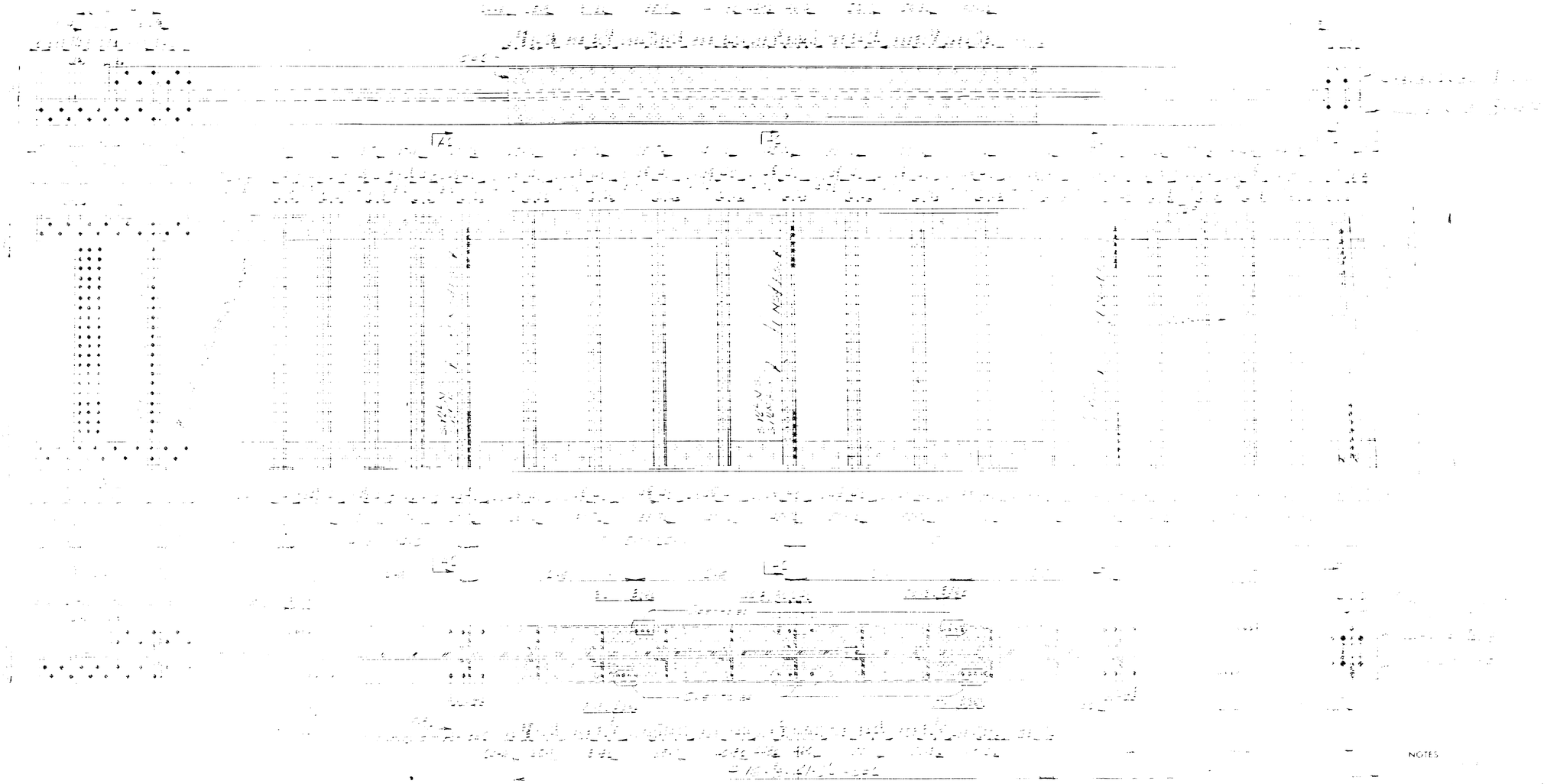
REVISION		
REVISION		

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

CUSTOMER
DESIGNER
ORDER NO.
DWG. NO. 2-1645

76-233



NOTES

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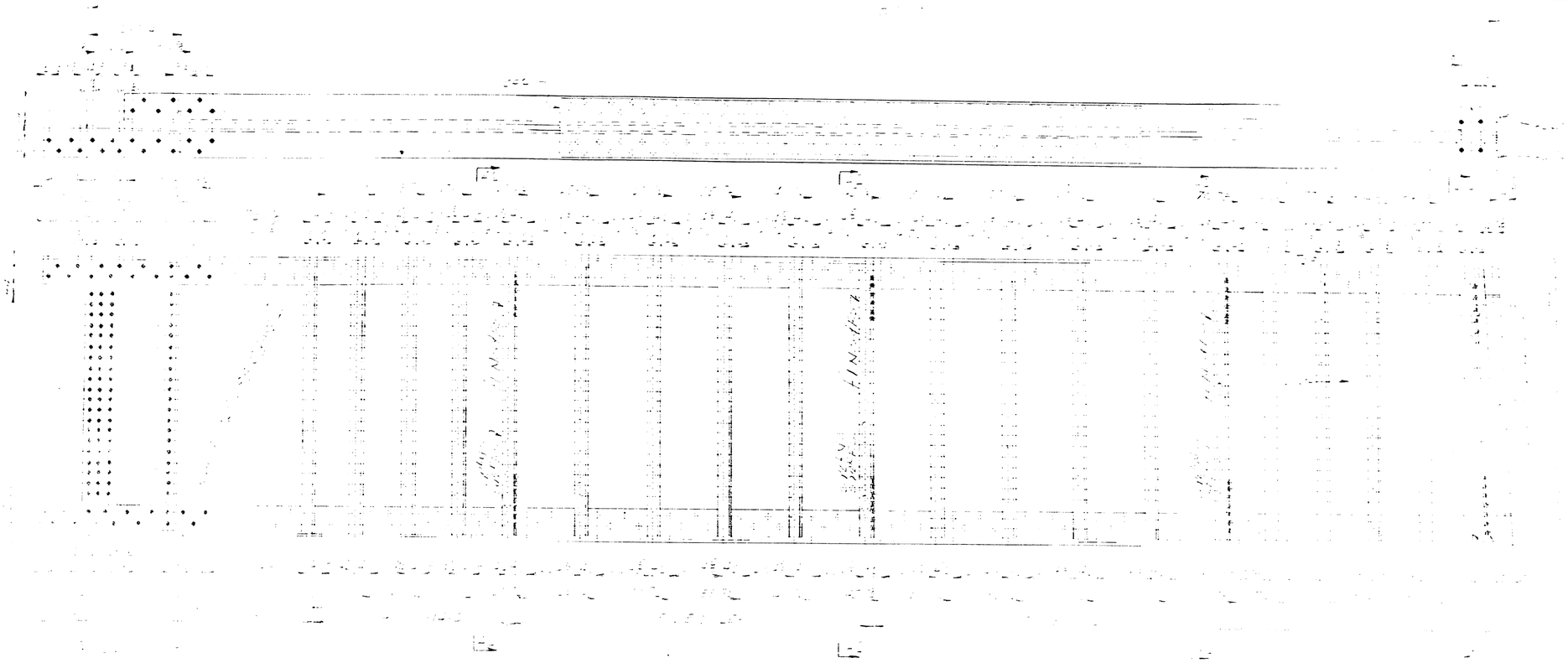
REVISION		

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

CUSTOMER
DESIGNER
ORDER NO | DWG NO

76-234



NOTES

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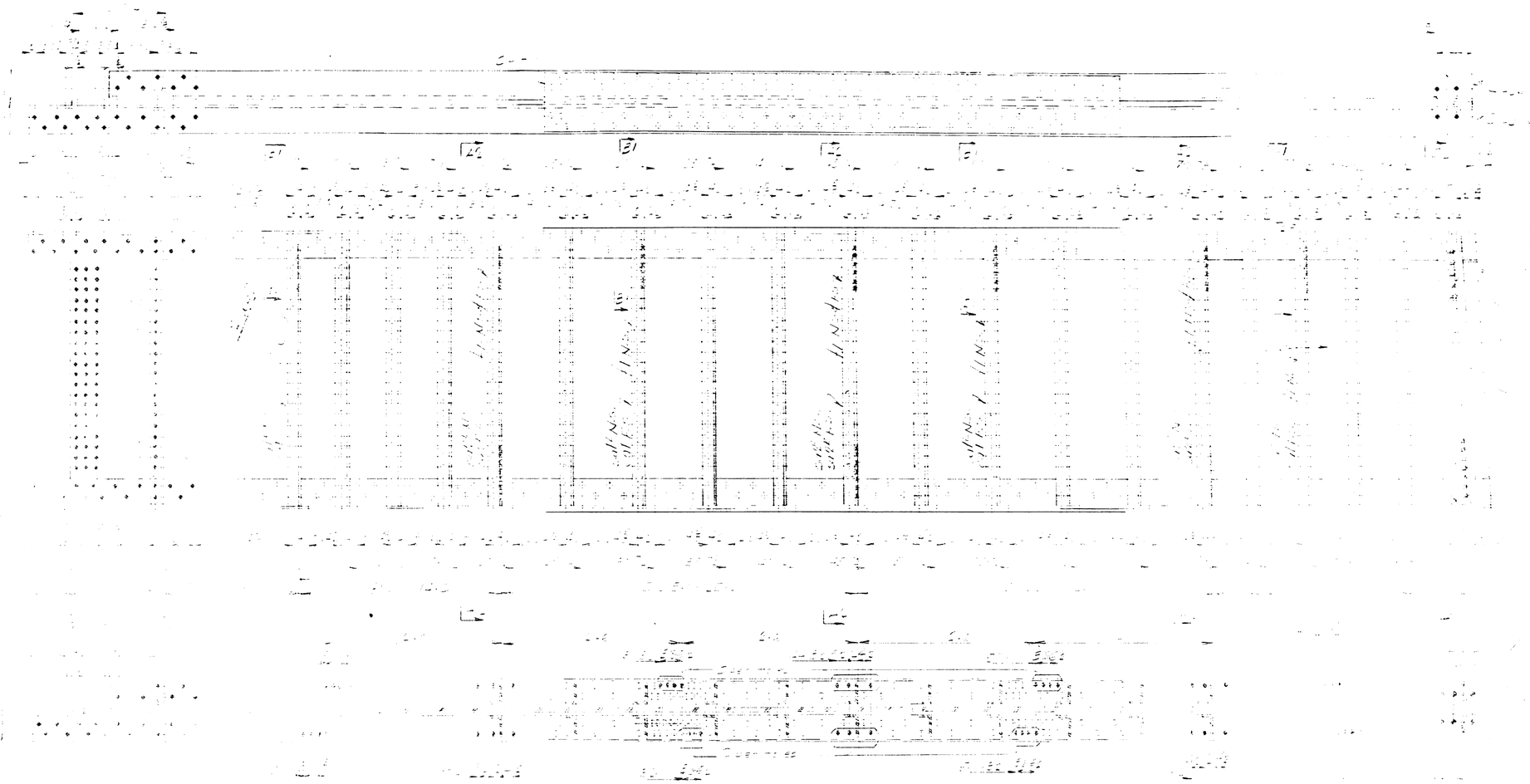
REVISION		
REVISION		
REVISION		

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

CUSTOMER
DESIGNER
ORDER NO. | DWG NO. B-1645

76-235



NOTES

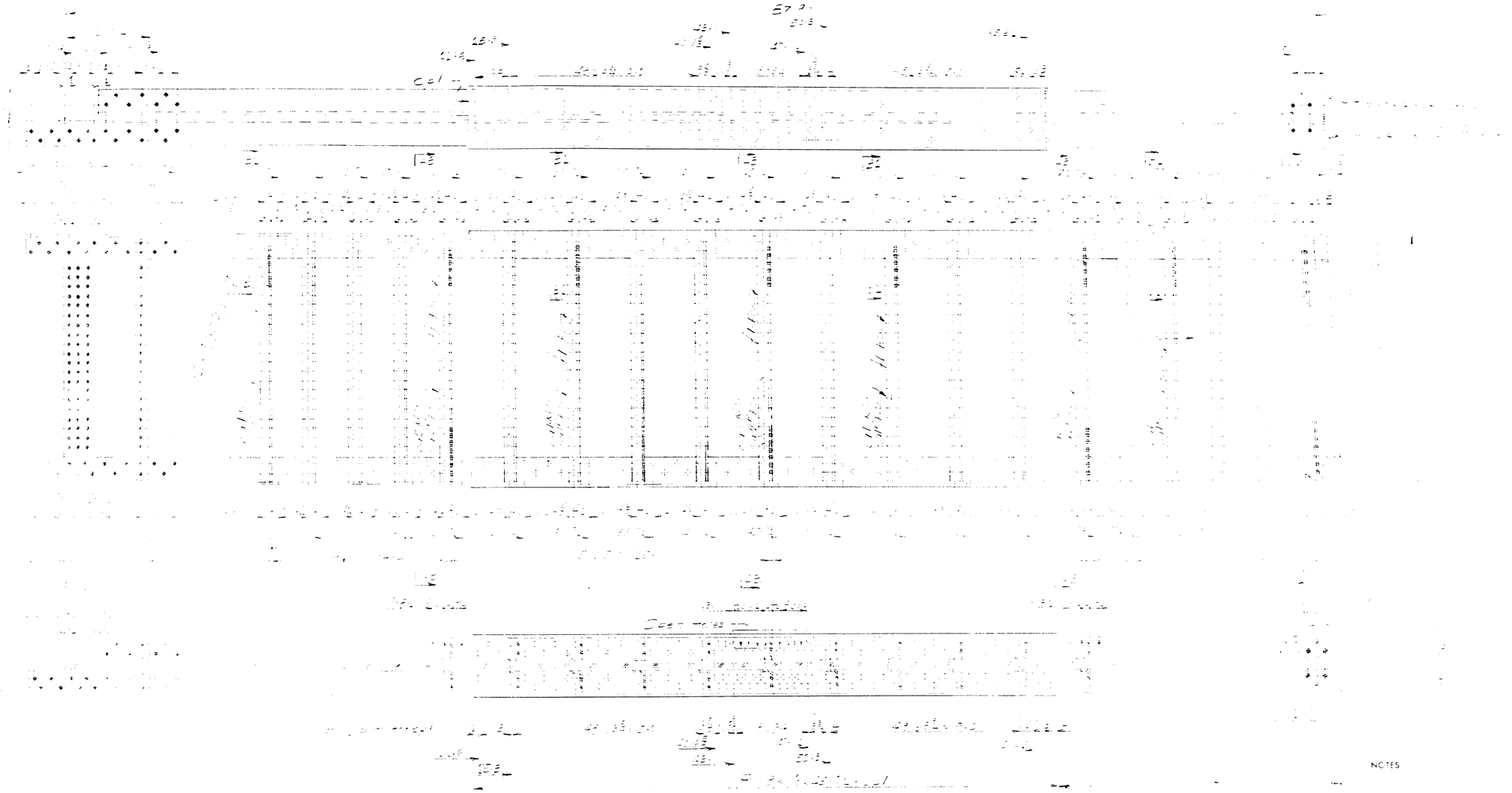
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

CUSTOMER ENG.
DESIGNER FRIEDLEY

DRAWN
REVISION
REVISION
REVISION

ORDER NO.
DWG. NO. 3-164-S

76-236



NOTES

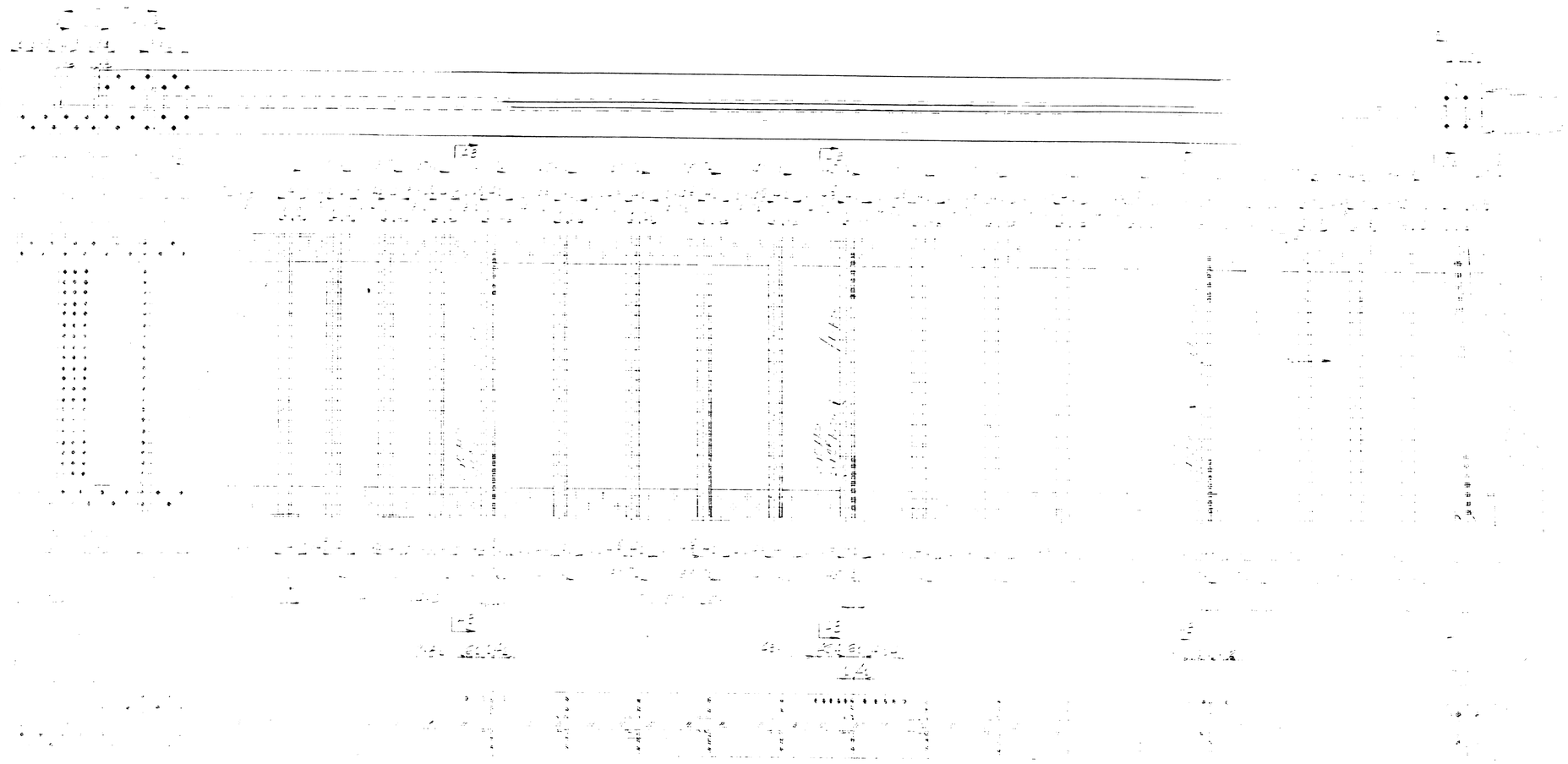
DRAWN		
REVISION		
REVISION		
REVISION		

Bancroft & Martin Rolling Mills Company
South Portland, Maine

CUSTOMER [illegible] ENG.
DESIGNER [illegible]

ORDER NO. [illegible] DWG. NO. S-164-S

76-237



NOTES

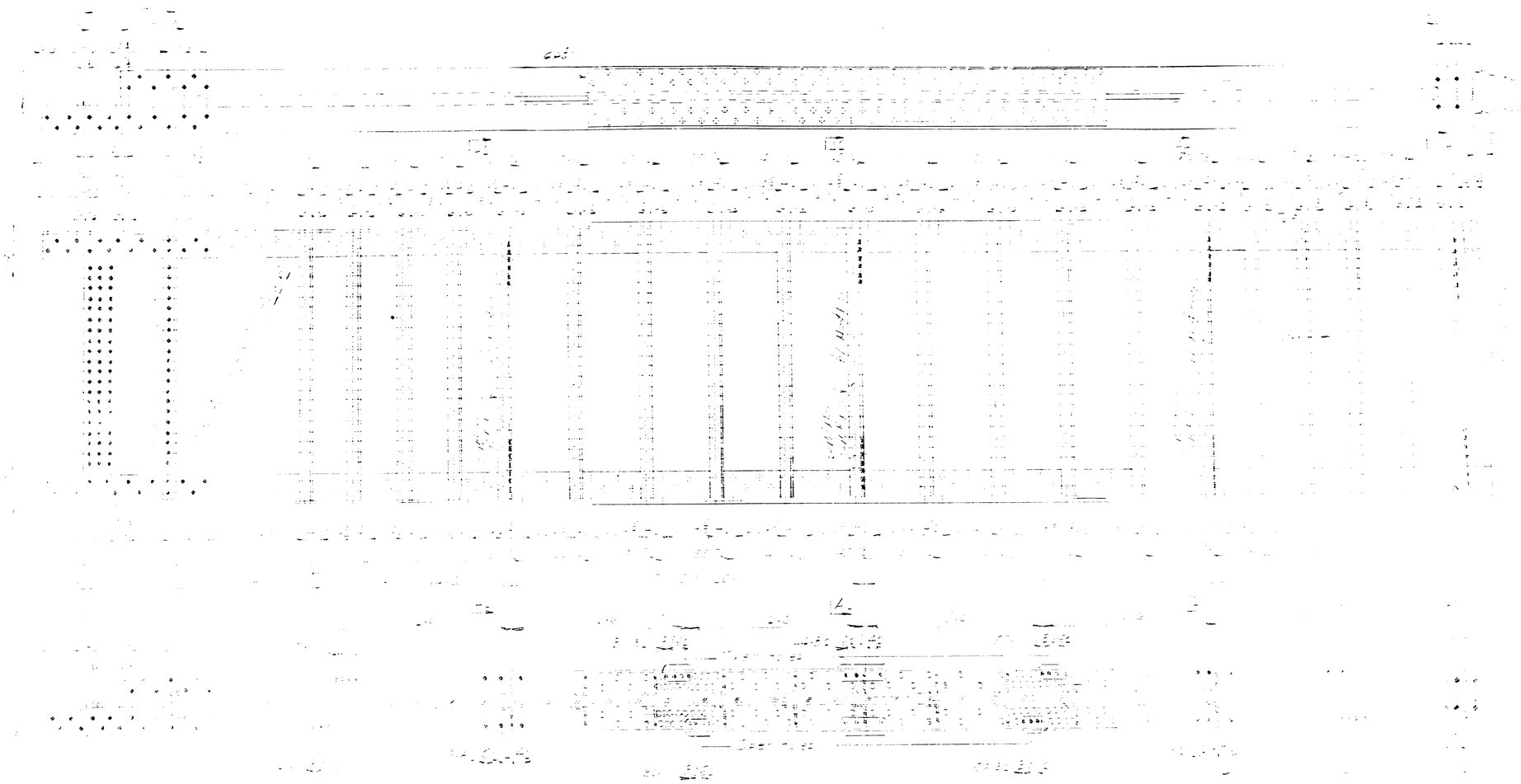
DRAWN		
REVISION		
REVISION		
REVISION		

Bancroft & Martin Rolling Mills Company
South Portland, Maine

CUSTOMER ____ INC.
DESIGNER ____

ORDER NO. ____ DWG. NO. 3-164-S-3

76-238



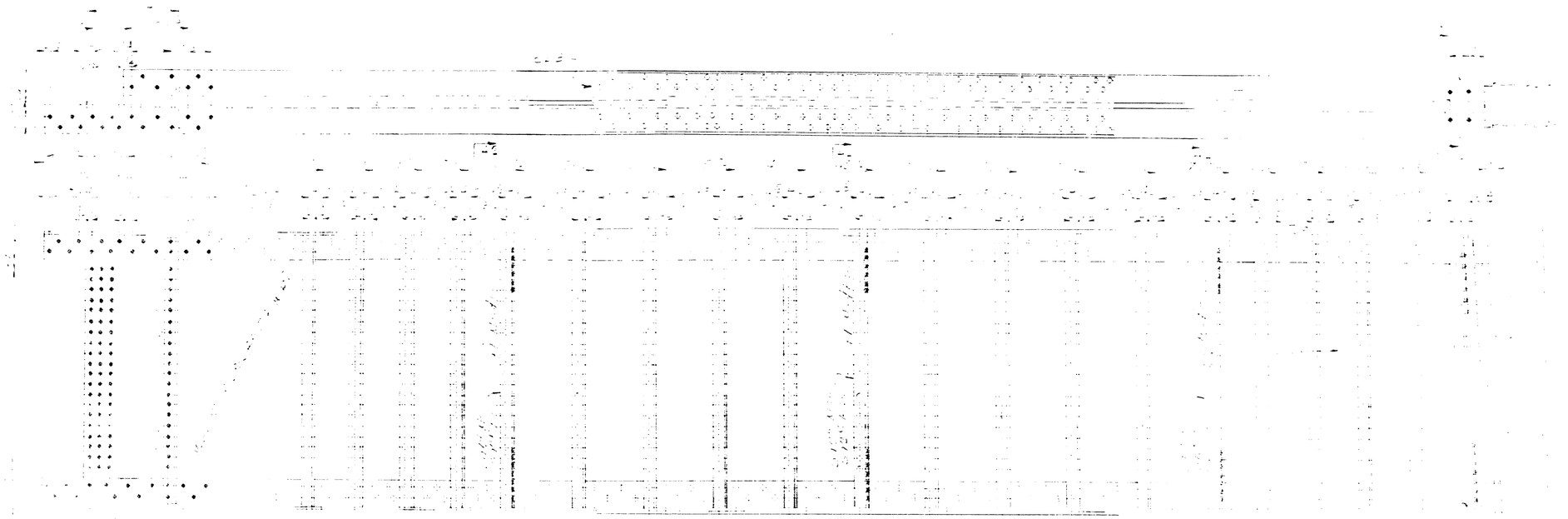
NOTES

DRAWN		
REVISION		
REVISION		
REVISION		

Bancroft & Martin Milling Mills Company
South Portland, Maine

CUSTOMER
DESIGNER
ORDER NO. | DWG NO. 1

76-239



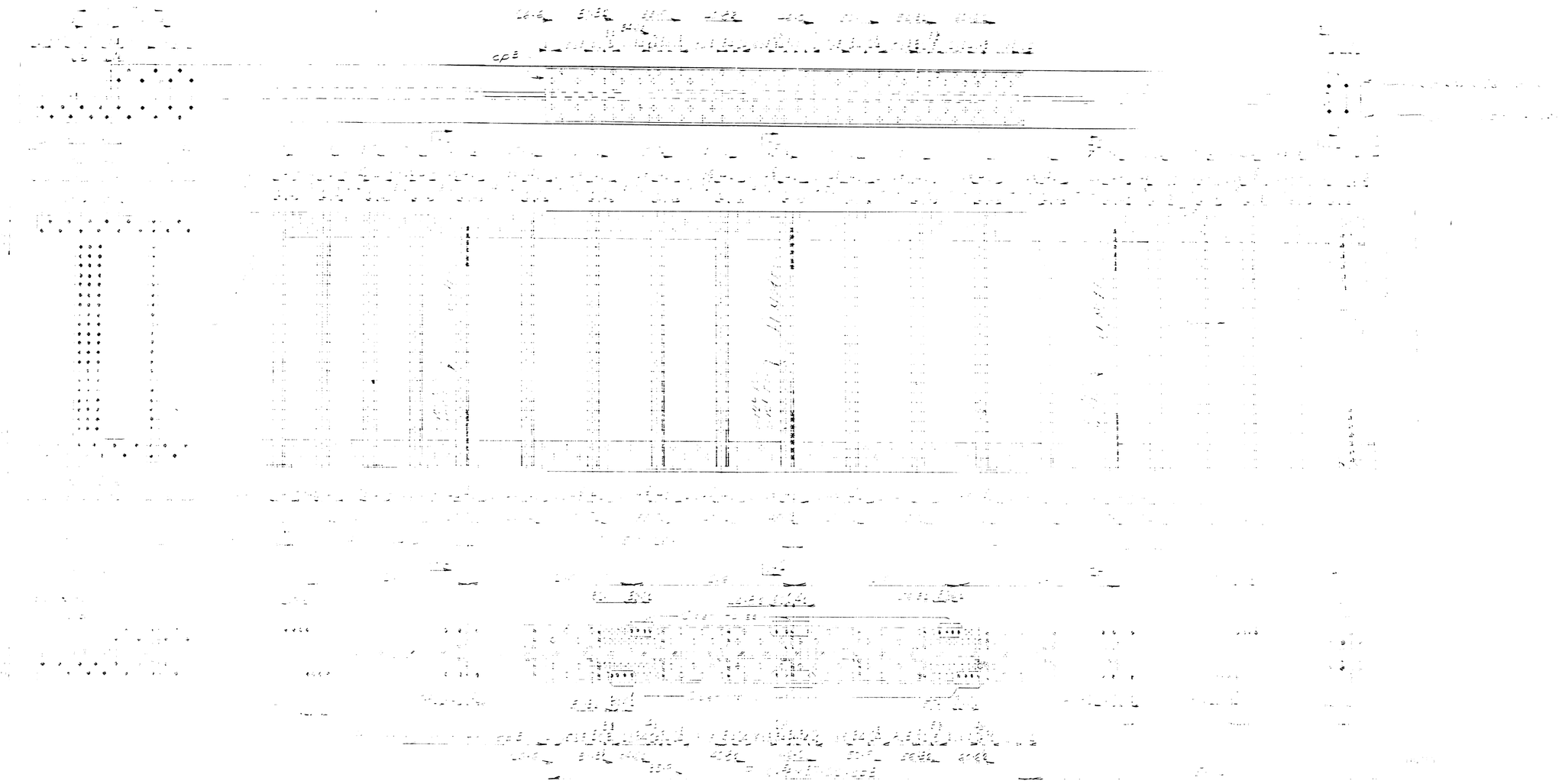
NOTES

Bancroft & Martin Rollins Whitt company
South Portland, Maine

CUSTOMER
DESIGNER

ORDER NO. | DWG. NO.

76-240

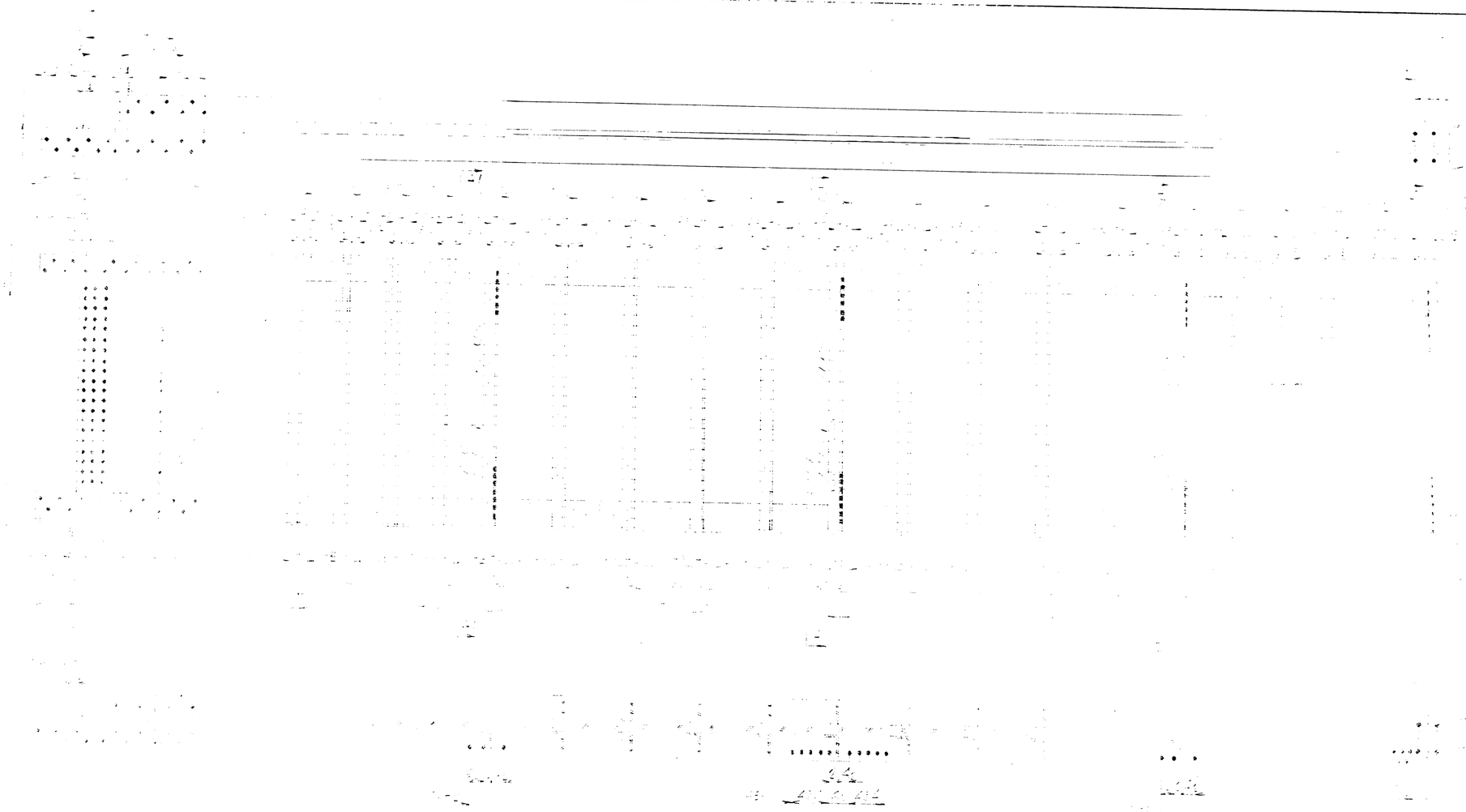


Bamford & Martin Belting Mills Company
South Portland Maine

DRAWN		
REVISION		
REVISION		
REVISION		

CUSTOMER
DESIGNER
ORDER NO.
DWG. NO

76-241

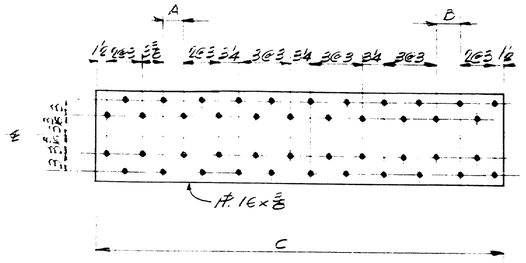


NOTES

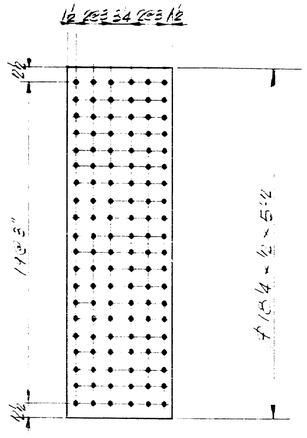
Bancroft & Martin Rolling Mills Company
South Portland, Maine

DRAWN	
REVISION	
REVISION	
REVISION	

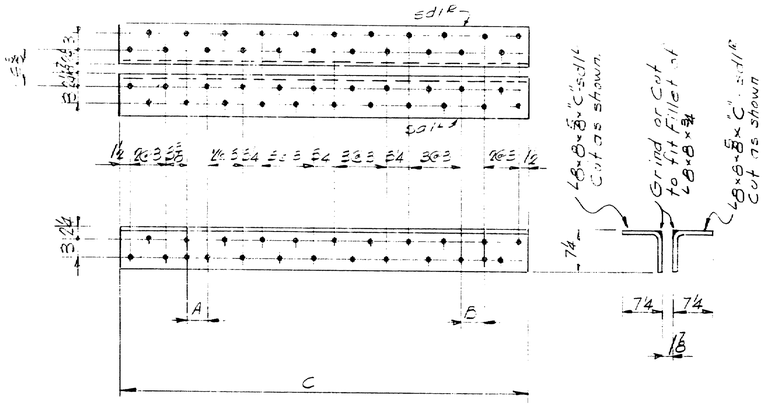
CUSTOMER
DESIGNER
ORDER NO.
DWG. NO. 76-242



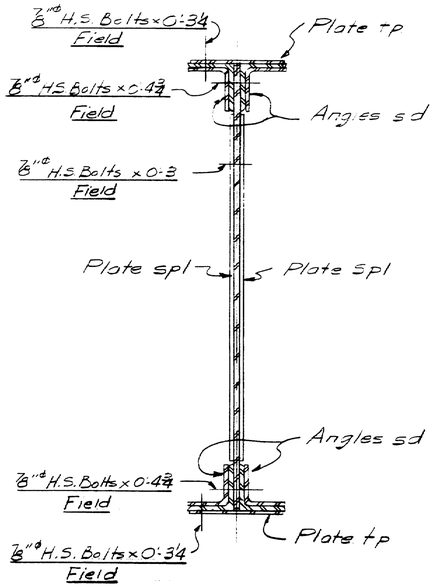
A	B	C	Mark	No	Location	S.B.	N.B.
3 1/4	4 7/16	5'-6 1/16	tp 1	20	Top-Splice #1 & 3	10	10
3 7/16	4 4	5'-6 1/16	tp 2	10	Top-Splice #2	5	5
3 5/16	4 5/16	5'-6 5/16	tp 3	10	Top-Splice #4	5	5
3	4	5'-6''	tp 4	60	Top-Splice #5 & 6 Bottom-Splice #1, 2, 3, 4, 5 & 6	40	40



Spl-120 Reqd.
(EO-SB)(EO-NB)



A	B	C	Mark	No	Location	S.B.	N.B.
3¼	4 1/16	5'-6 1/16	sd 1½	40	Top-Splice #1 & 3	20	20
3 7/16	4¼	5'-8 1/16	sd 2½	20	Top-Splice #2	10	10
3 5/16	4 5/16	5'-6 5/8	sd 3½	20	Top-Splice #4	10	10
3	4	5'-8''	sd 4½	160	Top-Splice #5 & 6 Bottom-Splice #1, 2, 3, 4, 5 & 6	80	80



TYPICAL SECTION
THROUGH SPLICE

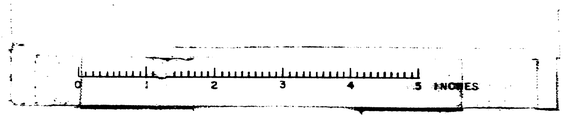
NOTES:
See General Notes
Dwg. No. B-164-S2
S.B.= Southbound Bridge
N.B.= Northbound Bridge

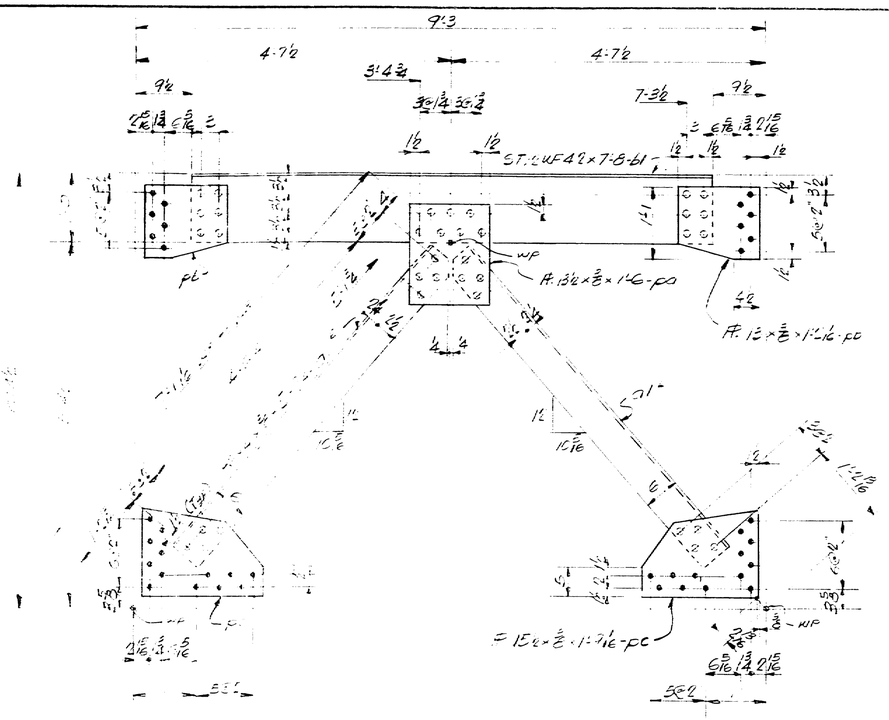
DRAWN	9-17-58	J.P.F.
REVISION		
REVISION		
REVISION		

APP. 10-17-58

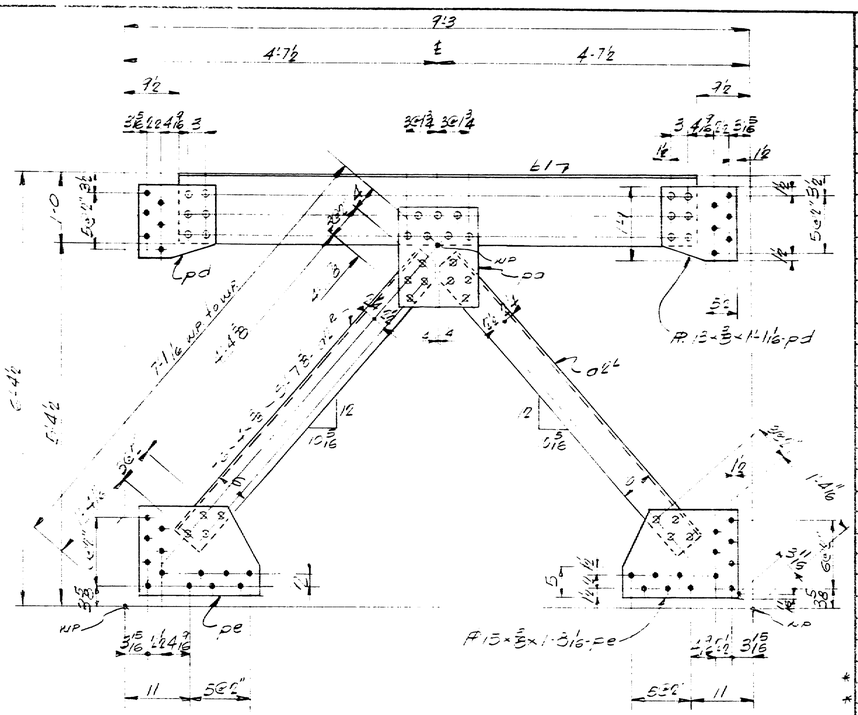
SPLICE COMPONENTS
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine
TUKEY'S BRIDGE
PORTLAND, MAINE
CUSTOMER W. H. HINMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.
ORDER NO. VERBAL
DWG. NO. B-164-S73

76-243

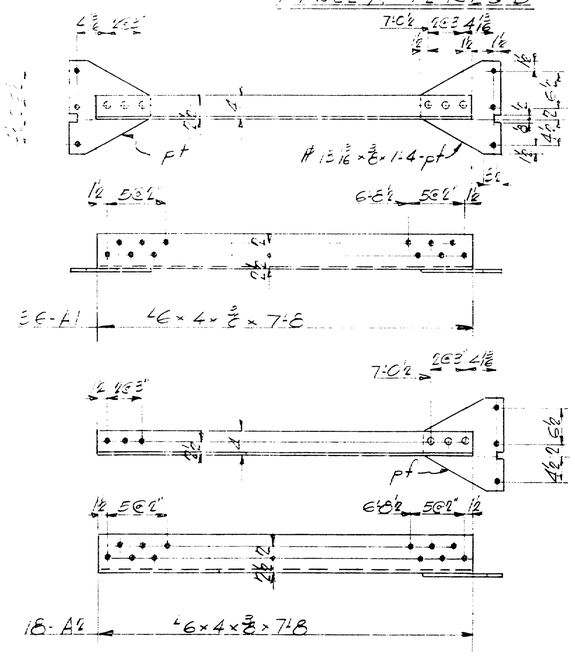


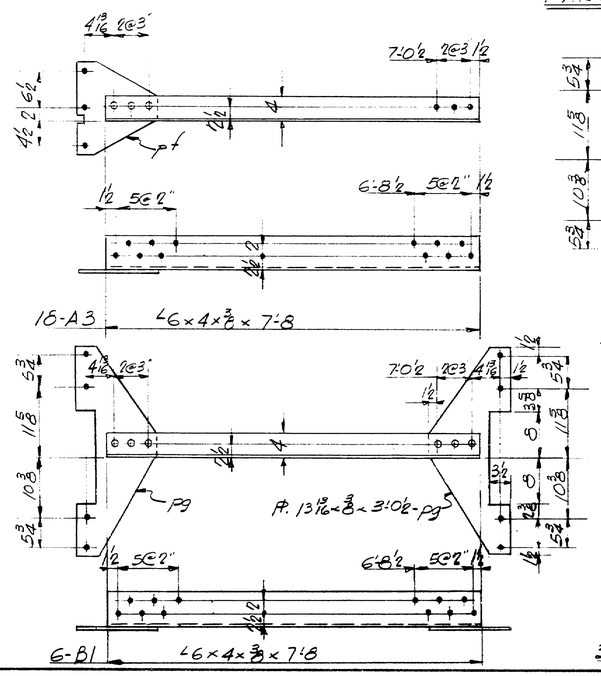


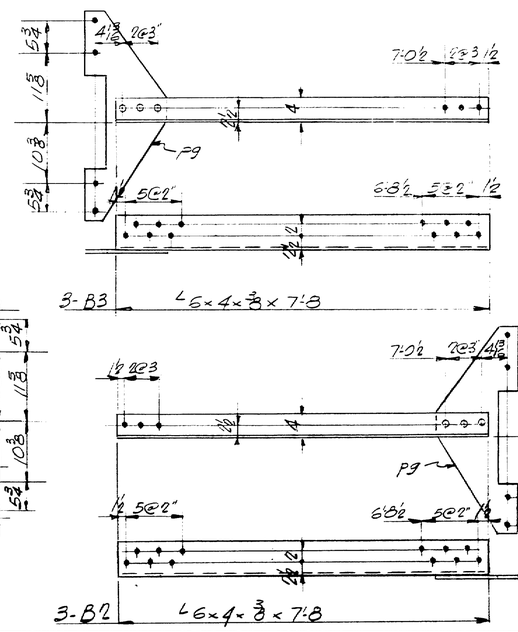
PANEL A - 7½ REQ'D



PANEL B - 40 REQ'D







SHIP		BILL OF MATERIAL				DWG NO B-164-S74
MARK	NO	MARK	SHAPE	LENGTH	WT	WT. CHECK	REMARKS
PANEL A	72		ASSEMBLY	7 C8	—		
PANEL B	20		Do	3 W03	—		
	72	D1	ST. 12WF42	7 8			
	44	J2	PL ⅜ x 1'-3⅜	5 9¼			
	40	J2A	Do	5 7⅜			
	72	D2	PL ⅜ x ⅜	1 6			
	44	D6	PL ⅜ x ⅜	1 5/16		5/16	
	44	D5	PL ⅜ x ⅜	1 1/16		719.	
	40	D1	PL ⅜ x ⅜	1 1/16		43.	
	40	D4	PL ⅜ x ⅜	3/16		76.	
A1	36		L6 x 4 - ⅜	7 3			
A2	13		Do	7 3			
A3	13		Do	7 3			
B1	6		Do	7 3			
B2	3		Do	7 3			
B3	3		Do	7 3			
B4	4		Do	7 3			
B5	2		Do	7 3			Detail B-164-S74A
B6	2		Do	7 3			" "
	28	D7	PL ⅝ x ⅜	1'		721.	
	3	E2	Do	3 1½		5/16	
	2	E1	PL ⅝ x ⅜	1 3/8			Detail B-164-S74A
	655		⅞" H.S. BOLTS	24			
	743	D2	Do	13			
FIELD	2114		⅞" H.S. BOLTS	D 24			
D2	300		D2	D 23¾			
D2	36		D2	D 3			
D2	500		D2	D 33¾			
D2	24		D2	D 33¾			
D2	13		D2	D 14			
D2	1226		⅞" H.S. NUTS	—			
D2	1226		⅞" H.S. CUT WASHERS	—			
			* Actual Count				
				— ITEM TOT. 138			

SHOP CONNECTIONS ⅞" Rivets
FIELD CONNECTIONS ⅞" H.S. Bolts
HOLES 15/16" ø
PAINT Per State of Maine Specs. unless noted.
See General Notes Dwg. B-164-S2

CROSS FRAME DETAILS
SOUTHBOUND BRIDGE

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEYS BRIDGE
PORTLAND, MAINE

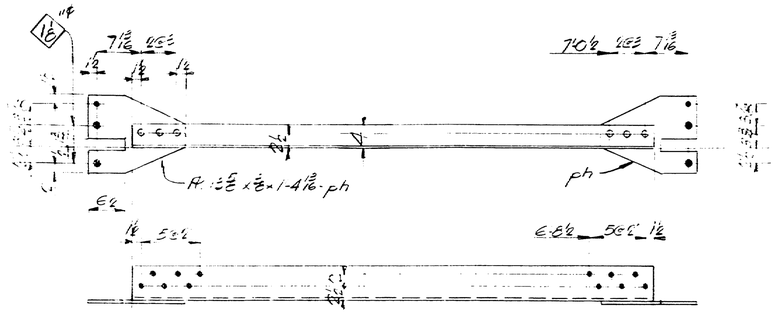
CUSTOMER U. H. HINMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.

ORDER NO. VERBAL | DWG. NO. B-164-S74

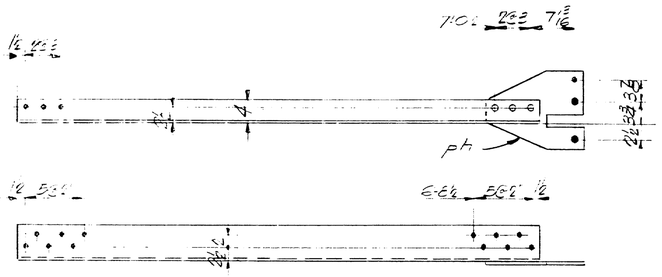
DRAWN	7-23-58	J.P.F.
REVISION	10-21-58	J.P.F.
REVISION		
REVISION		

APP 10-7-58

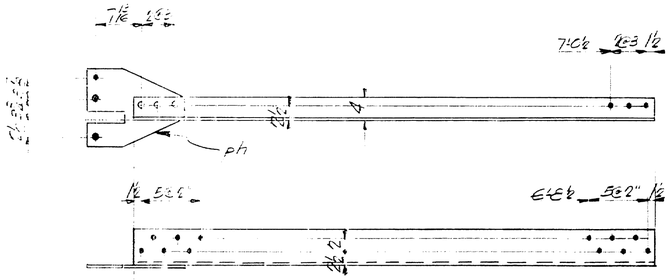
76-244



4-E4 L 4 x 4 x ⅜ x 7-6



2-E5 L 6 x 4 x ⅜ x 7-8



1-E6 L 6 x 4 x ⅜ x 7-8

NOTES:
FIELD JOINTS: ¾" Ø BOLTS
FIELD JOINTS: ¾" Ø H.S. BOLTS
HOLES: ¾" Ø DRILLED OR PUNCHED
PAINT: FOR DETAILS OF PAINTING SEE SPECIFICATIONS.
FOR GENERAL NOTES SEE DWG. 3-1452
FOR SHOP NOTES SEE DWG. 3-1454

CROSS FRAME DETAILS
SOUTH BOUND BRIDGE

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEYS BRIDGE
PORTLAND, MAINE

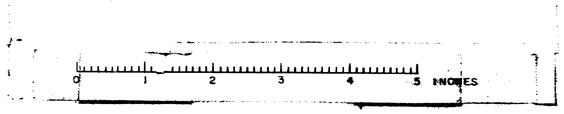
CUSTOMER W. H. HILLMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.

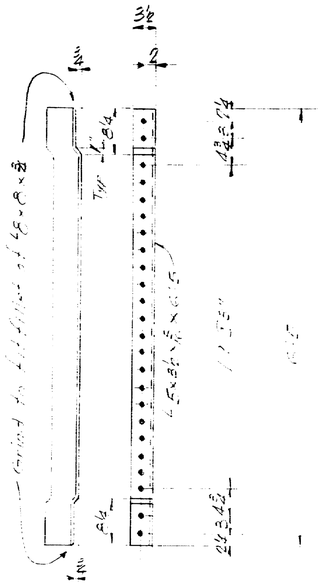
DRAWN	9-24-56	J.P.F.
REVISION		
REVISION		
REVISION		

ORDER NO. VERBAL | DWG. NO. 3-164-574A

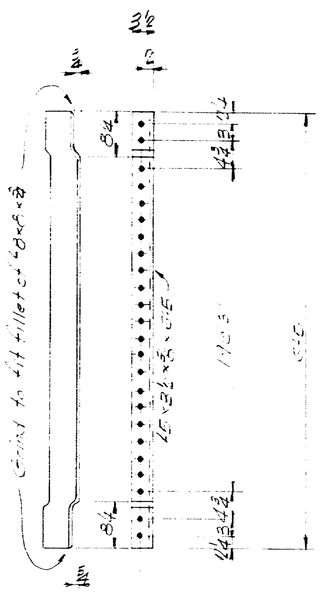
APR 16 17-58

76-245

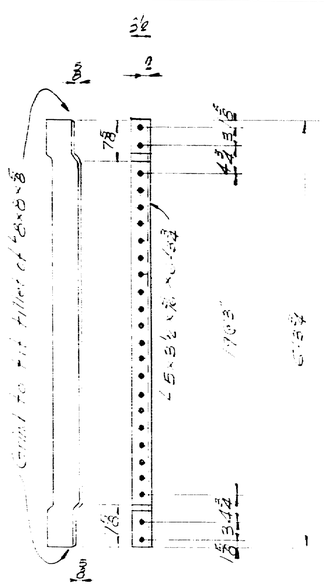




col - 1836 Reqd
(24C - 2E)
(24N - NE)



col - 70 Reqd
(3E - SB)
(3C - NB)



col - 240 Reqd
(1SO - SB)
(1SO - NB)
(2 Spaces)

NOTES.

See General Notes
Dwg. No. B-161-S1

SB = Southbound Bridge
NB = Northbound Bridge

DRAWN	7-8-58	J.P.R.
REVISION		
REVISION		
REVISION		

APP. 10-17-58

CURVED ANGLE DETAILS

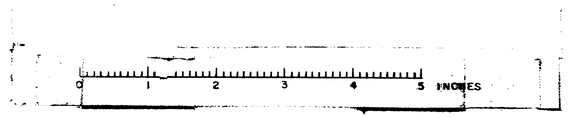
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

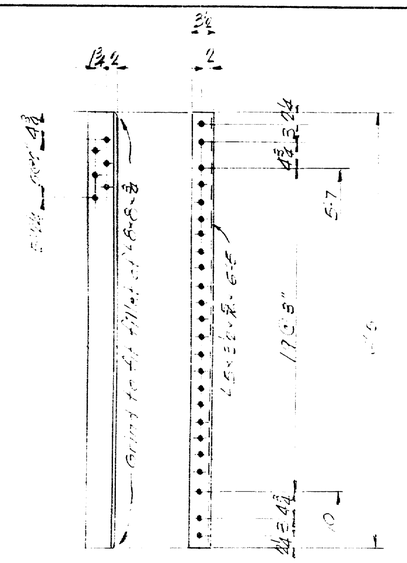
FORE'S BRIDGE
PORTLAND, MAINE

CUSTOMER W. H. HINMAN INC.
DESIGNER MAINE S. & C. BRIDGE DIV.

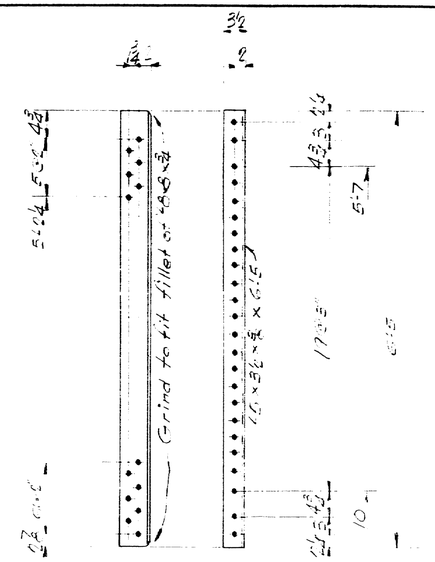
ORDER NO. VERBAL | DWG. NO. B-161-S75

76-246

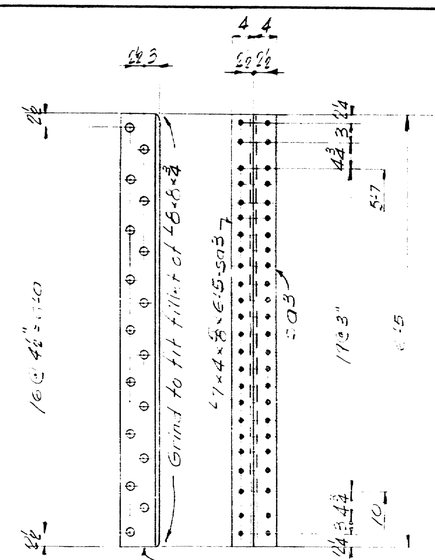




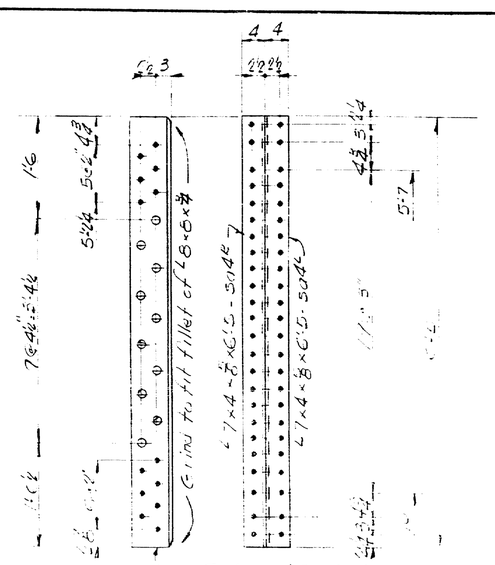
Sa1L - 11 Reqd. - As Shown (11-NB)
Sa1L - 11 Reqd. - Opp Hand (11-NB)



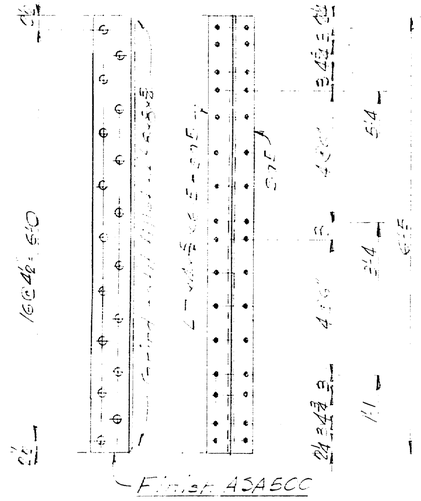
Sa2R - 144 Reqd. As Shown (72-SB)(72-NB)
Sa2L - 144 Reqd. Opp Hand (72-SB)(72-NB)



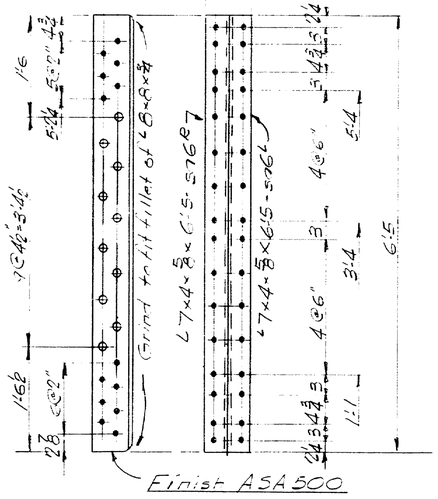
12 Reqd (6-SB)(6-NB)



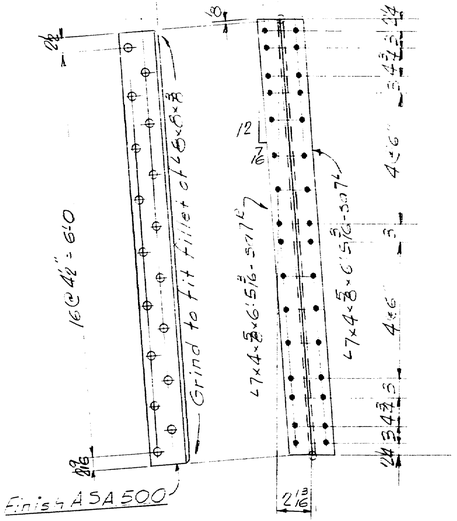
43 Reqd. (21-SB)(22-NB)



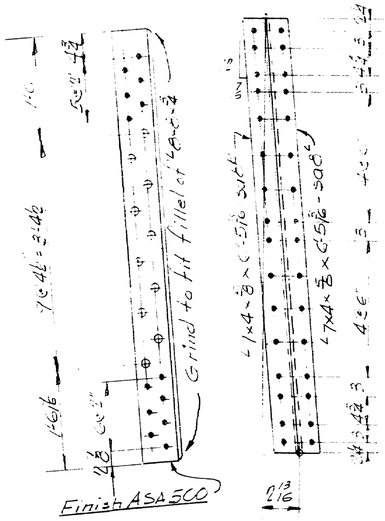
4 Reqd (2-SB)(2-NB)



16 Reqd (8-SB)(8-NB)



2 Reqd - As Shown (1-SB)(1-NB)
2 Reqd - Opp Hand (1-SB)(1-NB)



8 Reqd - As Shown (4-SB)(4-NB)
8 Reqd - Opp Hand (4-SB)(4-NB)

NOTES:

For General Notes see Dwg. No. B-164-S2

For Material Data & Details see Dwg. No. B-164-S3

DRAWN	7-7-58	J.R.F.
REVISION	10-21-58	J.R.F.
REVISION		
REVISION		

STIFFENER DETAILS

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEY'S BRIDGE
PORTLAND, MAINE

CUSTOMER W. H. HINMAN, INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.

ORDER NO. VERBAL | DWG. NO. B-164-S76

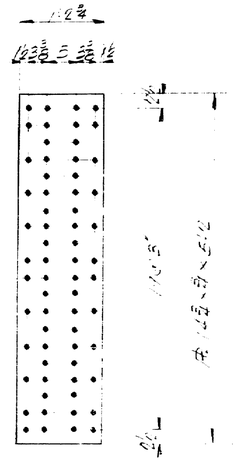
APP. 10-17-58

(L)

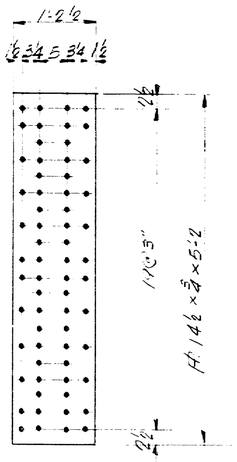
76-247

0 1 2 3 4 5 INCHES

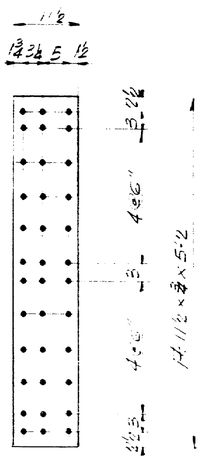
-1- 5½ Reqd.
(20-SE)
(20-NE)



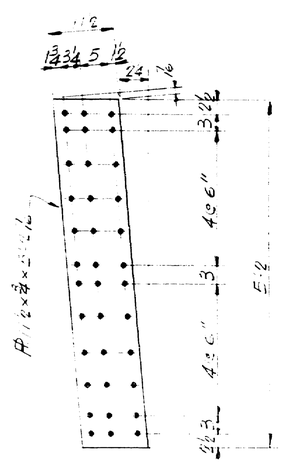
-2- 4C Reqd.
(10-SE)
(10-NE)



-3- 2C Reqd
(10-SE)
(10-NE)



-4- 2C Reqd
(10-SE)
(10-NE)



-5- 4C Reqd.
(10-SE)
(10-NE)

NOTES:

FOR DETAIL NOTES SEE
DWG B-164-S1

SEE SHOP DRAWINGS FOR
VERTICAL CURVATURE OF BRIDGE

FILLER DETAILS

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEYS BRIDGE
PORTLAND MAINE

CUSTOMER W.H. HINMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.

ORDER NO. VERBAL DWG. NO. B-164-S77

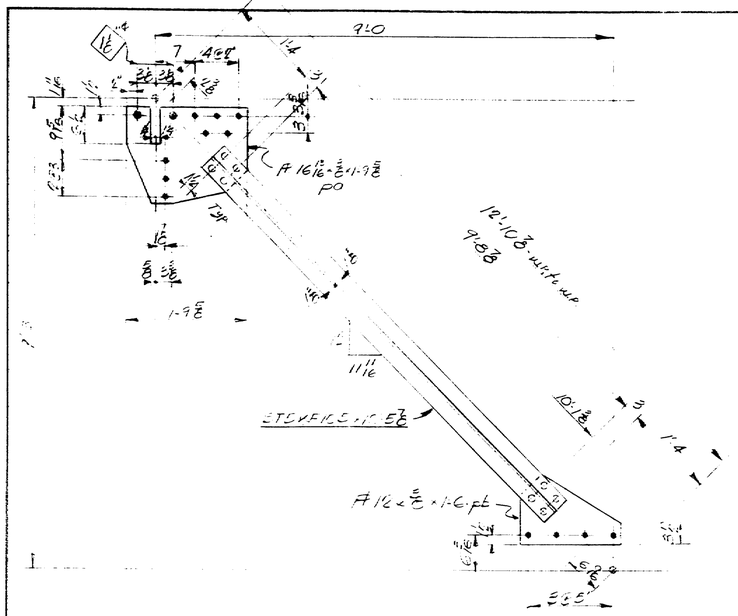
DRAWN	7-10-58	J.P.R.
REVISION		
REVISION		
REVISION		

APP'D 10-17-58

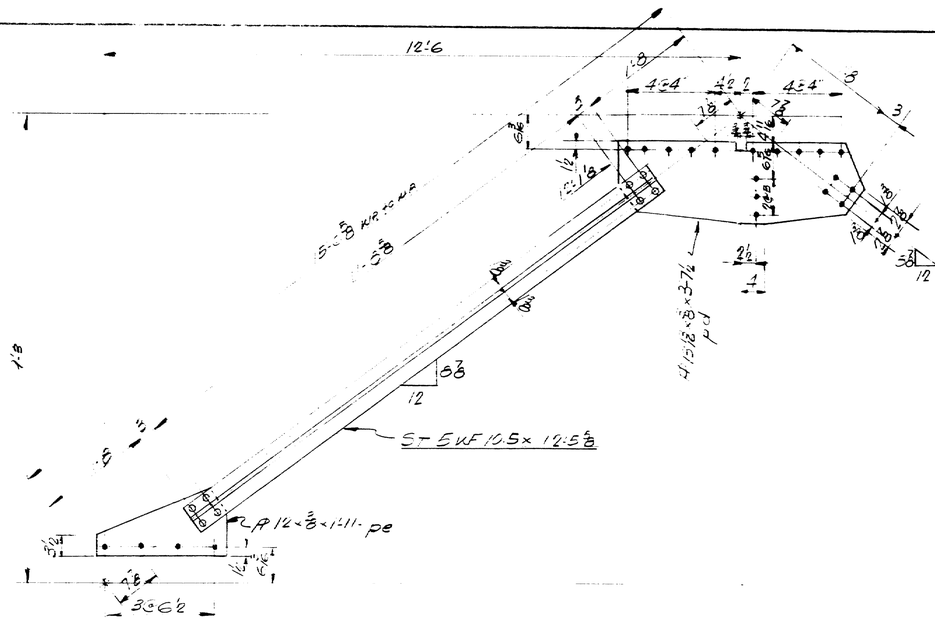
D

76-248

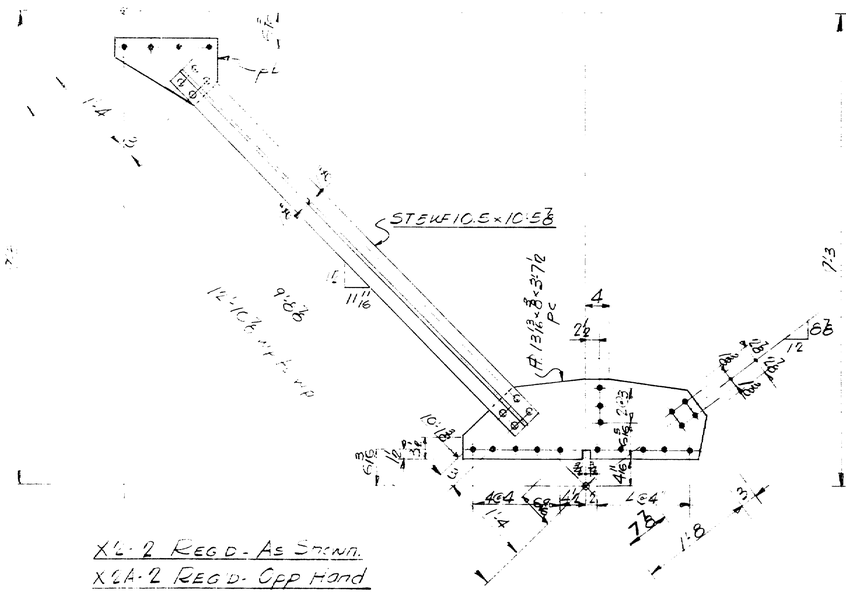
0 1 2 3 4 5 INCHES



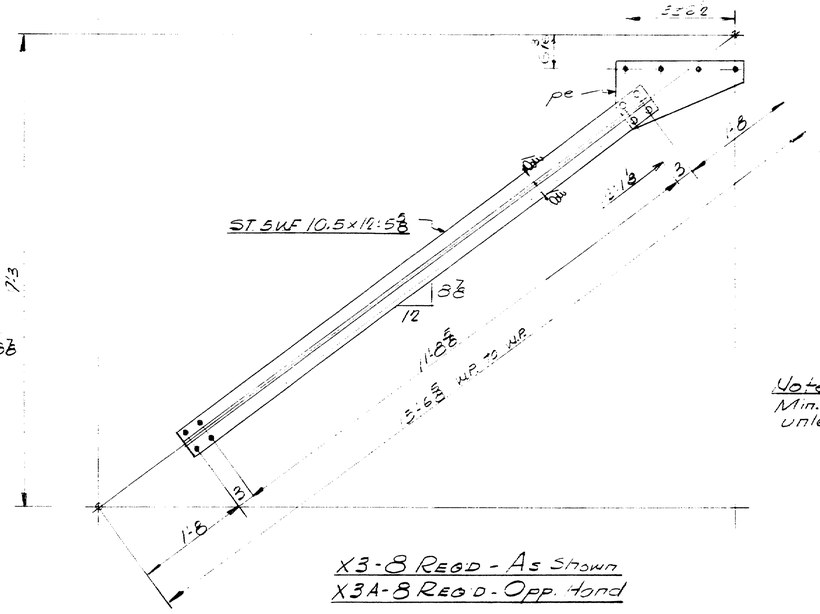
X1-2 REQ'D - As Shown
X1A-2 REQ'D - Opp Hand



X4-8 REQ'D. As Shown
X4A-8 REQ'D. Opp Hand



X2-2 REQ'D - As Shown.
X2A-2 REQ'D. Opp Hand



X3-8 REQ'D - As Shown
X3A-8 REQ'D - Opp. Hand

Vote
Min. edge distance = 1/2" unless noted.

SHIP MARK	NO	MARK	SHAPE	LENGTH	WT	WT. Detail	REMARKS
X1	2		ST 5WF10.5	10 5 3/8			
X1A	2			10 5 3/8			
X2	2			10 5 3/8			
X2A	2			10 5 3/8			
X3	8			12 5 3/8			
X3A	8			12 5 3/8			
X4	8			12 5 3/8			
X4A	8			12 5 3/8			
X5	4			12 5 3/8			
X5A	4			12 5 3/8			
X6	1			12 5 3/8			
X6A	1			12 5 3/8			
X7	2			12 5 3/8			
X7A	2			12 5 3/8			
X8	2			10 5 3/8			
X8A	2			10 5 3/8			
	4	pa	PL 5/8 x 3	1'		13.	
	8	pb	PL 1/2 x 5	1'		13.	
	4	pc	PL 13/16 x 3	3' 7		13.	
	6	pd	1/2	5' 1/8		7 6.	
	32	pe	5/8 x 3	1' 11		28.	
	2	pf	1/2	6' 0		12.	
	2	pg	PL 7 7/8 x 3/8	2' 2		4.	
	2	ph	PL 5 x 5/8	1' 6		4.	
	4	pj	1/2	1' 3		2.	
	4	pk	1/2	1' 6		4.	
	4	pm	PL 6 1/8 x 3/8	3' 6 4		2.	
	350	SHD	3/4" RIVETS	0 6 4			50 # per 100

ITEM 72 - 175.3

SHOP CONNECTIONS: 7/8" Ø Rivets
FIELD CONNECTIONS: 3/4" H.T.S.S. Bolts
HOLES: 13/16" for rivets 7/8" for bolts
PAINT: Per clause 34 of Maine Specs. 1 coat as noted.
See GENERAL NOTES Dwg. B-164-S2

LATERAL BRACING DETAILS
SOUTHBOUND BRIDGE

Bancroft & Martin Rolling Mills Company
South Portland, Maine

TUKEYS BRIDGE
PORTLAND, MAINE

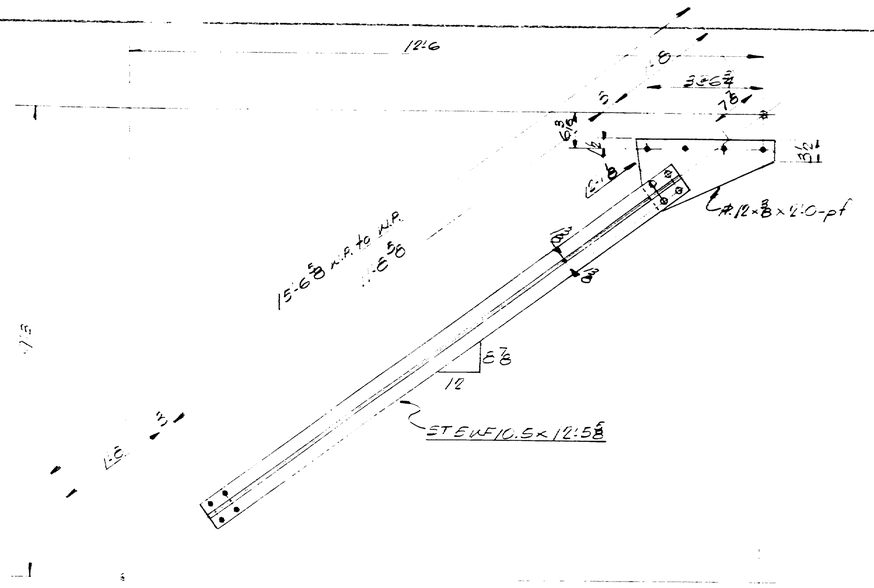
CUSTOMER W. H. HINMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.

ORDER NO. VERBAL | DWG. NO. B-164-S78

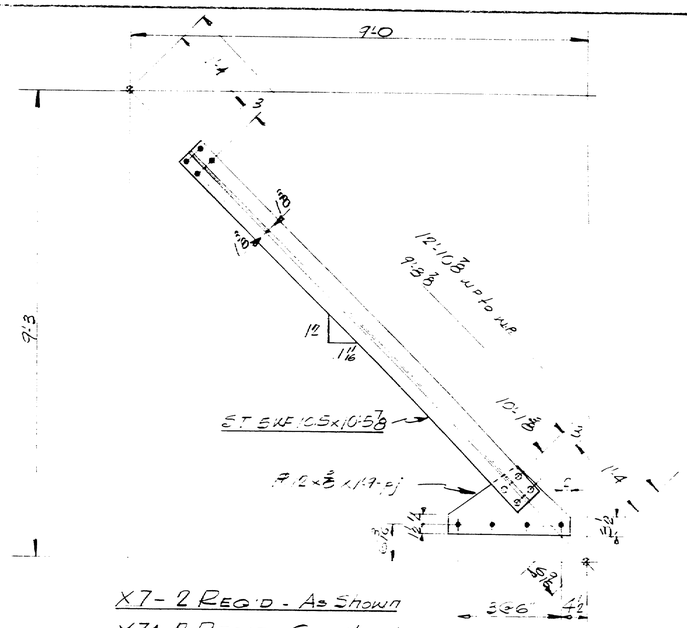
DRAWN	9-26-58	J.P.A.
REVISION	10-21-58	J.P.A.
REVISION		
REVISION		

APP'D 11-7-58

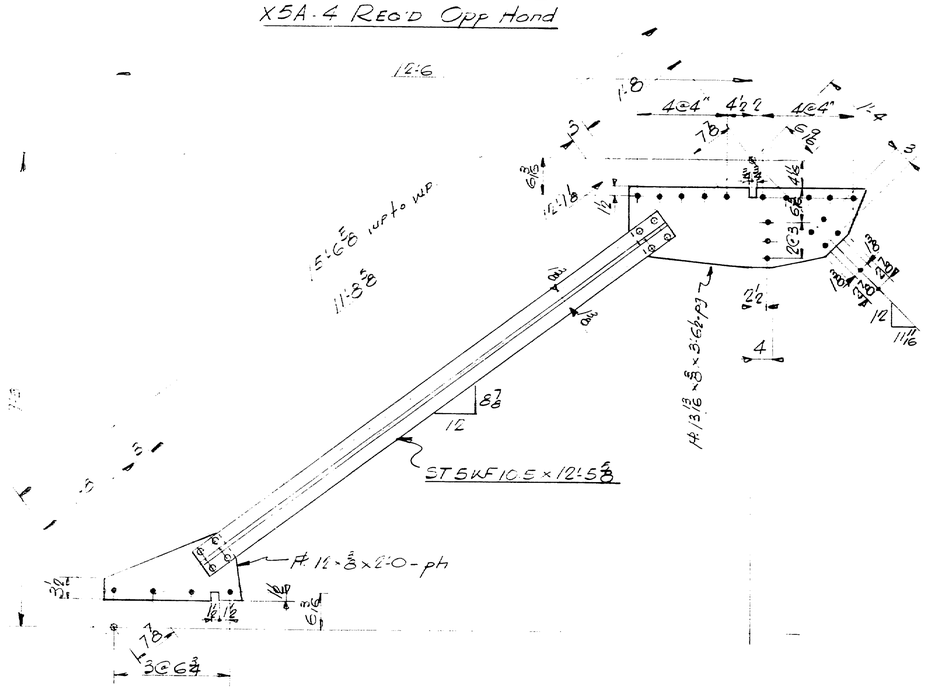
76-249



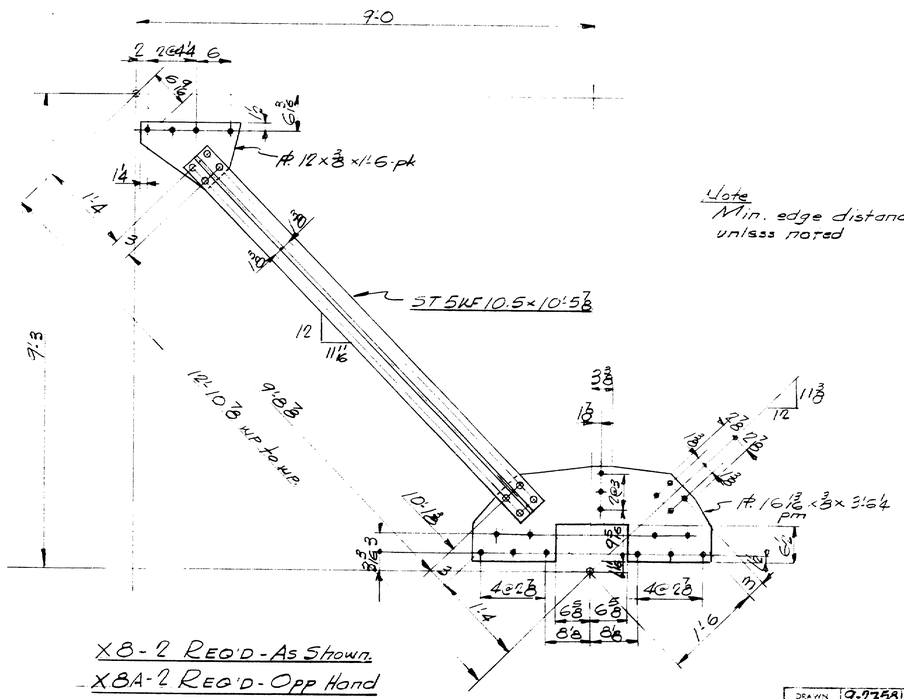
X5 - 4 Req'd. As Shown.
X5A - 4 Req'd Opp Hand



X7 - 2 Req'd - As Shown
X7A - 2 Req'd - Opp Hand.



X6 - One Req'd - As Shown.
X6A - One Req'd. Opp Hand



X8 - 2 Req'd - As Shown.
X8A - 2 Req'd - Opp Hand

Note
Min. edge distance = 1/2" unless noted

NOTES:
SHOP CONN.: 3/4" ø Rivets
FIELD CONN.: 3/4" ø H.S. Bolts
HOLES: 13/16" ø
PAINT: Per State of Maine Specs. if as noted.

For Bill of Material See Dwg 8-164-578
See General Notes Dwg. 8-164-58

LATERAL BRACING DETAILS
SOUTHBOUND BRIDGE

Bancroft & Martin Rolling Mill Company
South Portland, Maine

TUKEYS BRIDGE
PORTLAND, MAINE

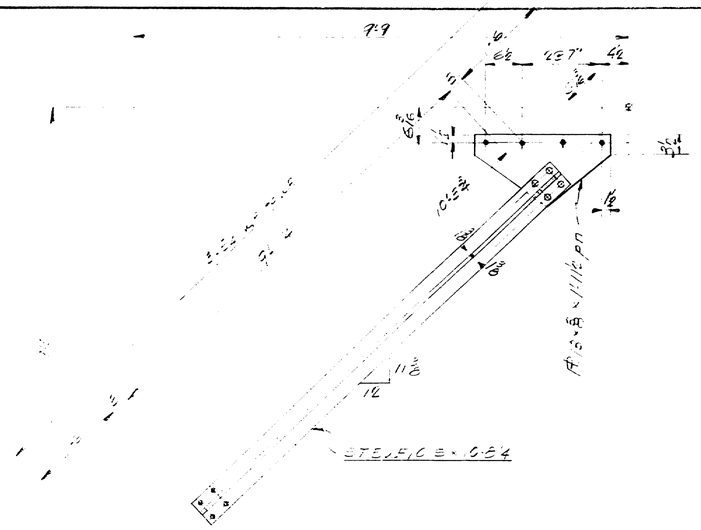
DRAWN	9-27-58	J.P.F.
REVISION	10-21-58	J.P.F.
REVISION		
REVISION		

CUSTOMER W.H. HINMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.
ORDER NO VERBAL
DWG. NO 8-164-579

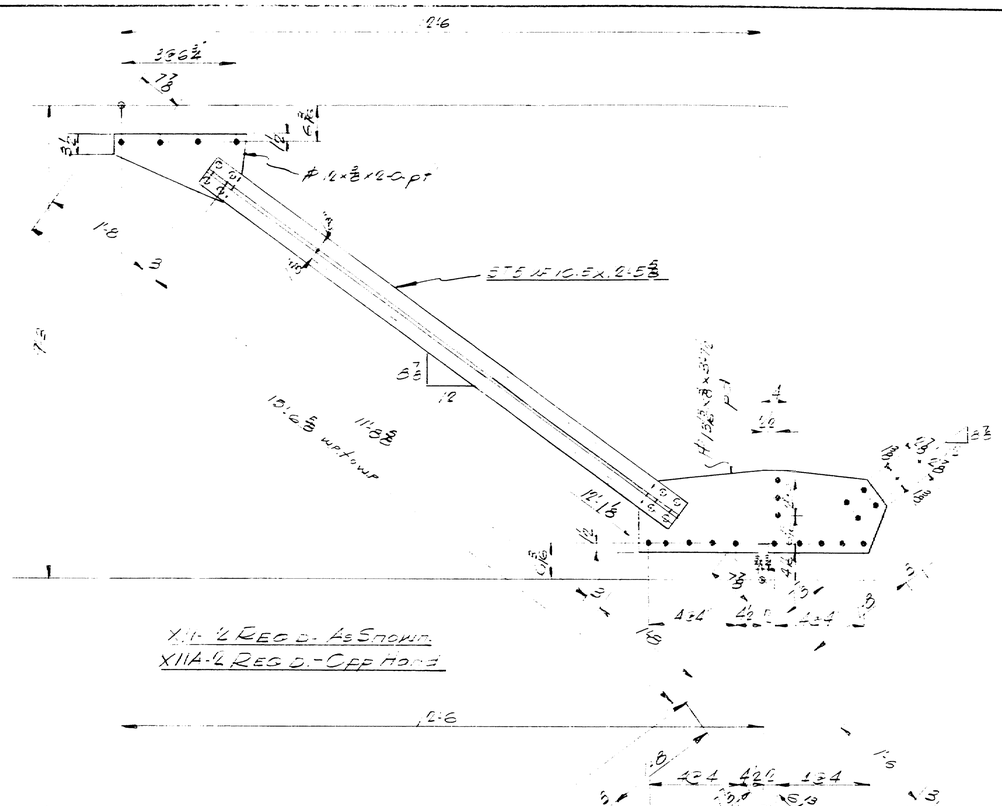
APP 10-17-58

MURRAY BLUE PRINT CO.

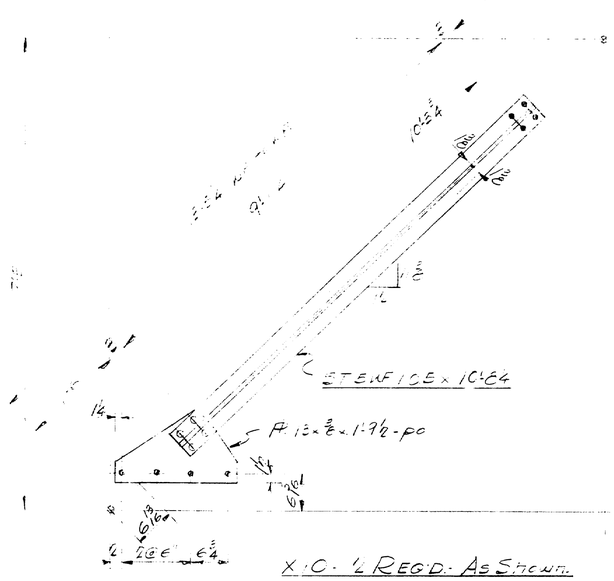
76-250



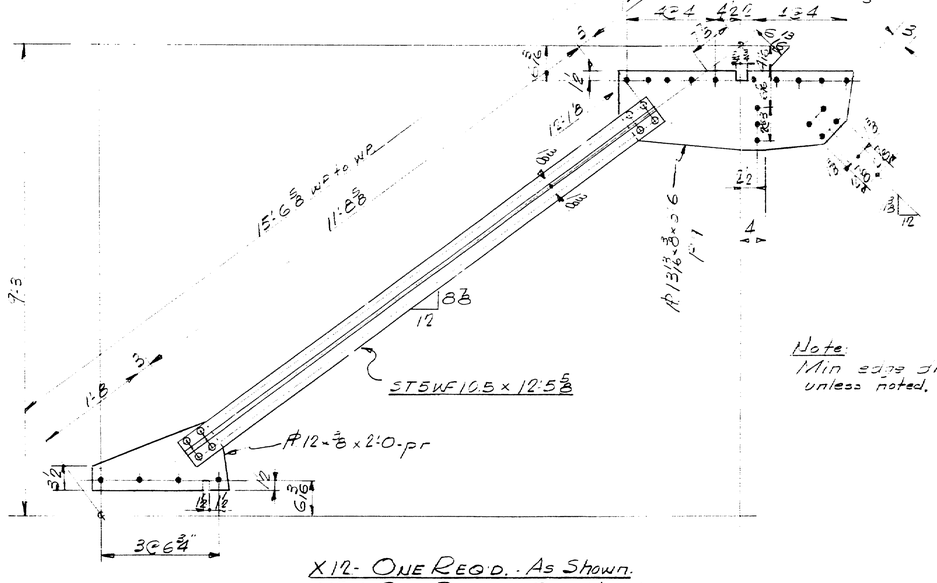
X9 - 1 REQ'D. - AS SHOWN.
X9A - 1 REQ'D. - OPP HAND



X11 - 1 REQ'D. AS SHOWN.
X11A - 1 REQ'D. - OPP HAND



X10 - 1 REQ'D. AS SHOWN.
X10A - 1 REQ'D. OPP HAND



X12 - ONE REQ'D. - AS SHOWN.
X12A - ONE REQ'D. - OPP HAND.

Note:
Min edge distance - 1½
unless noted.

SHIP MARK	NO	MARK	SHAPE	LENGTH	WT.	WT. DEDUCT	REMARKS
X9	2		STSWF10.5	10 2¾			
X9A	2			10 2¾			
X10	2			10 2¾			
X10A	2			10 2¾			
X11	2			12 5⅝			
X11A	2			12 5⅝			
X12	1			12 5⅝			
X12A	1			12 5⅝			
X13	2			10 2¾			
X13A	2			10 2¾			
X14	1			10 2¾			
X14A	1			10 2¾			
X15	1			10 2¾			
X15A	1			10 2¾			
X16	1			12 5⅝			
X16A	1			12 5⅝			
X17	1			12 5⅝			
X17A	1			12 5⅝			
X18	1			12 5⅝			
X18A	1			12 5⅝			
X19	1			12 5⅝			
X19A	1		STSWF10.5	10 2¾			
	4	a2	PL ⅜x3½	3 1½		1.	
	4	a1	PL ⅜x5½	5 0		1.	
	4	a3	PL ⅜x3	1 2		1.	
	4	a5	L3½x3½x⅜	1 10		1.	
	2	a4	PL ⅜x6	3 6		1.	
	5	a5	PL ⅜x2	2 0		1.	
	4	a6	PL ⅜x5	1 10⅜		1.	
	1	a7	L6x4x⅜	1 14		1.	
	2	a9	PL ⅜x3½	3 6¾		1.	
	2	a10	PL ⅜x3½	3 7½		1.	
	2	a11	L6x4x⅜	3 5¾		1.	
	4	a12	PL ⅜x3	1 1½		1.	
	2	a13	PL ⅜x3½	3 5¾		1.	
	2	a14	L6x4x⅜	3 7½		1.	
	34	HSB	3/4" DIA.	0 2¼			16" per 100
FIELD	23		3/4" HS BOLTS	0 2¼			36" per 100
Do	37?			0 2¾			36" per 100
Do	64			0 3			36" per 100
Do	16			0 3¼			36" per 100
Do	52			0 3½			36" per 100
Do	20			0 3¾			36" per 100
Do	72		3/4" HS BOLTS	0 4			36" per 100
Do	168		3/4" HS BOLTS		—		
Do	1152		3/4" DIA. (SHOP RIVETS)		—		

SHOP CONNECTIONS: 3/4" Ø RIVETS
FIELD CONNECTIONS: 3/4" HS BOLTS.
HOLES: 13/16"
PAINT: ONE COAT OF RED LEAD AND LINSEED OIL.

REF. GENERAL NOTES DWG # 64-52

LATERAL BRACING DETAILS
SOUTHBOUND BRIDGE

Bancroft & Martin Rollins Hills & Company
South Portland 7, Maine

TUKEYS BRIDGE
PORTLAND, MAINE

CUSTOMER M. H. HINMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.

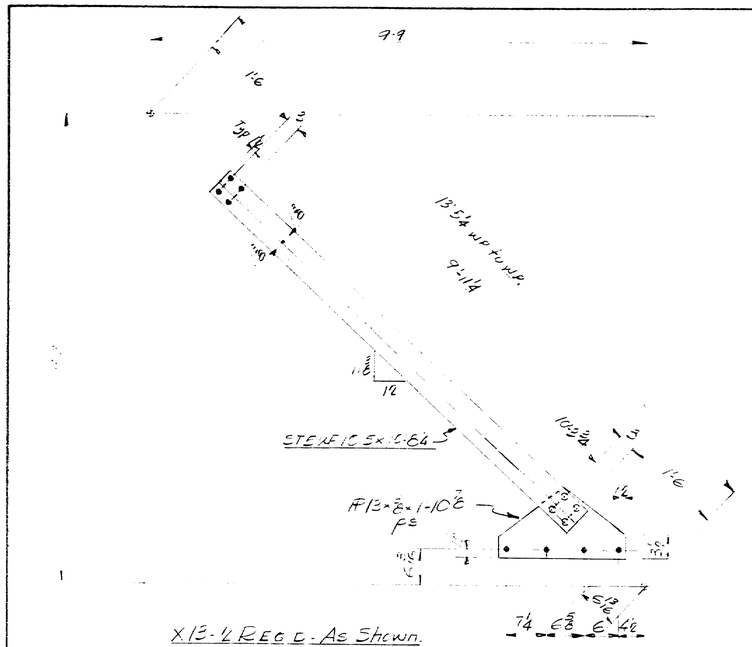
ORDER NO. 1EEBAL | DWG. NO. 8-164-580

DRAWN	7-29-58	J.P.F.
REVISION	10-21-58	J.P.F.
REVISION		
REVISION		

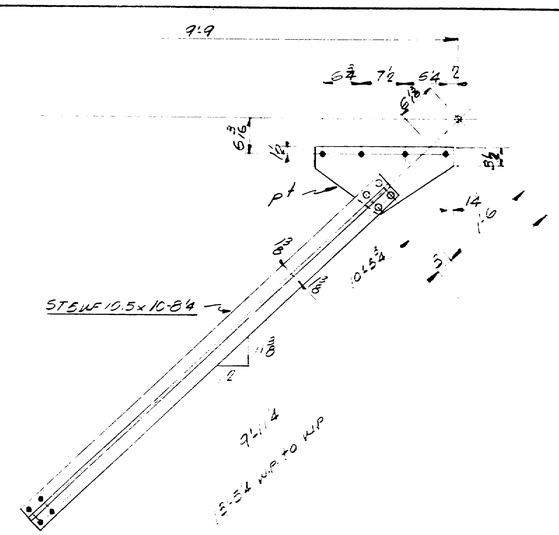
APP'D 1956

(5)

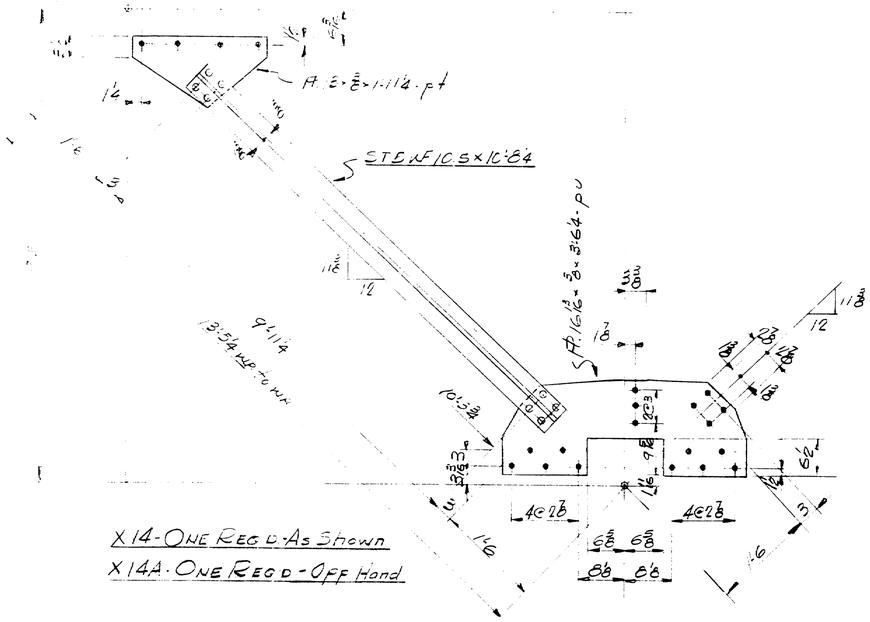
76-251



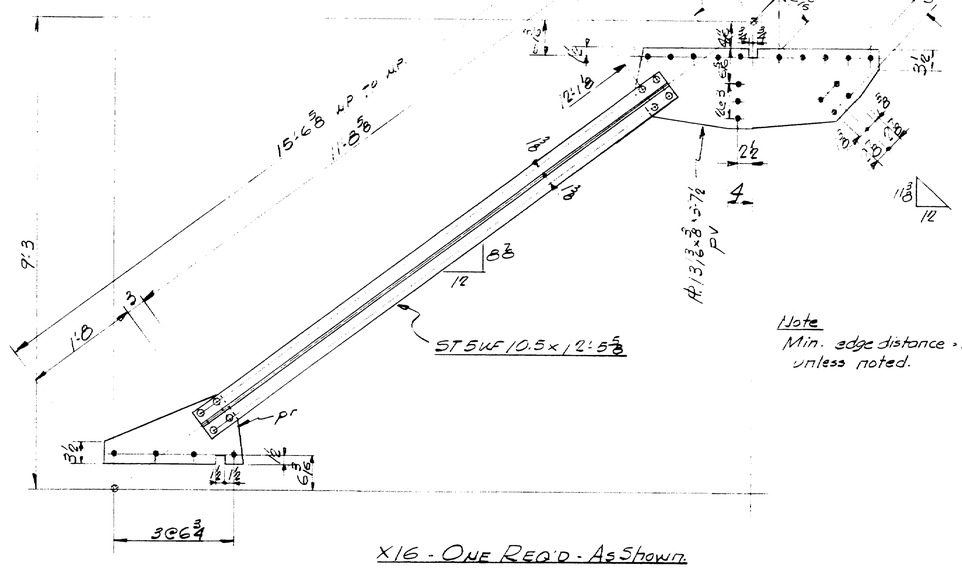
X13-4 REQ'D: As Shown.
X13A-4 REQ'D: Opp Hand



X15-ONE REQ'D: As Shown
X15A-ONE REQ'D- Opp Hand



X14-ONE REQ'D: As Shown
X14A-ONE REQ'D-OPP Hand



Note
Min. edge distance = 1½
unless noted.

X16-ONE REQ'D-As Shown.
X16A-ONE REQ'D- Opp. Hand.

NOTES:
SHOP CONN: ¾ Ø A325 B
FIELD CONN: ¾ Ø H.S. BOLTS
UNLESS 1⅛ Ø
FOR LOCATION OF WELDING SEE DWG. 3-164-S2

For Bill of Material see Dwg. 3-164-S80
See GENERAL NOTES Dwg. 3-164-S2

LATERAL BRACING DETAILS
SOUTHBOUND BRIDGE

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEYS BRIDGE
PORTLAND, MAINE

CUSTOMER VI. H. HINNIAN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.

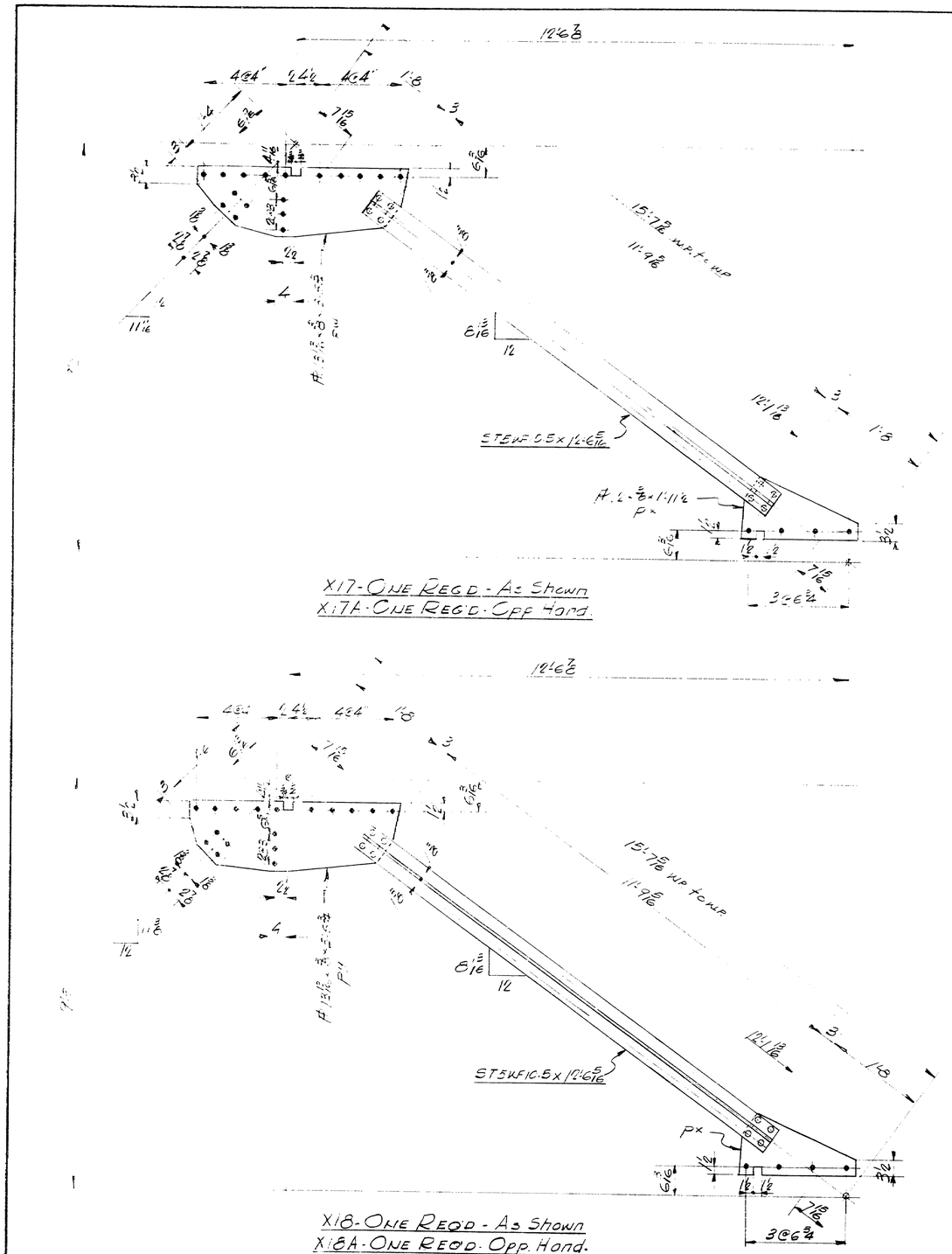
ORDER NO. VERBAL | DWG. NO. 8-164-S81

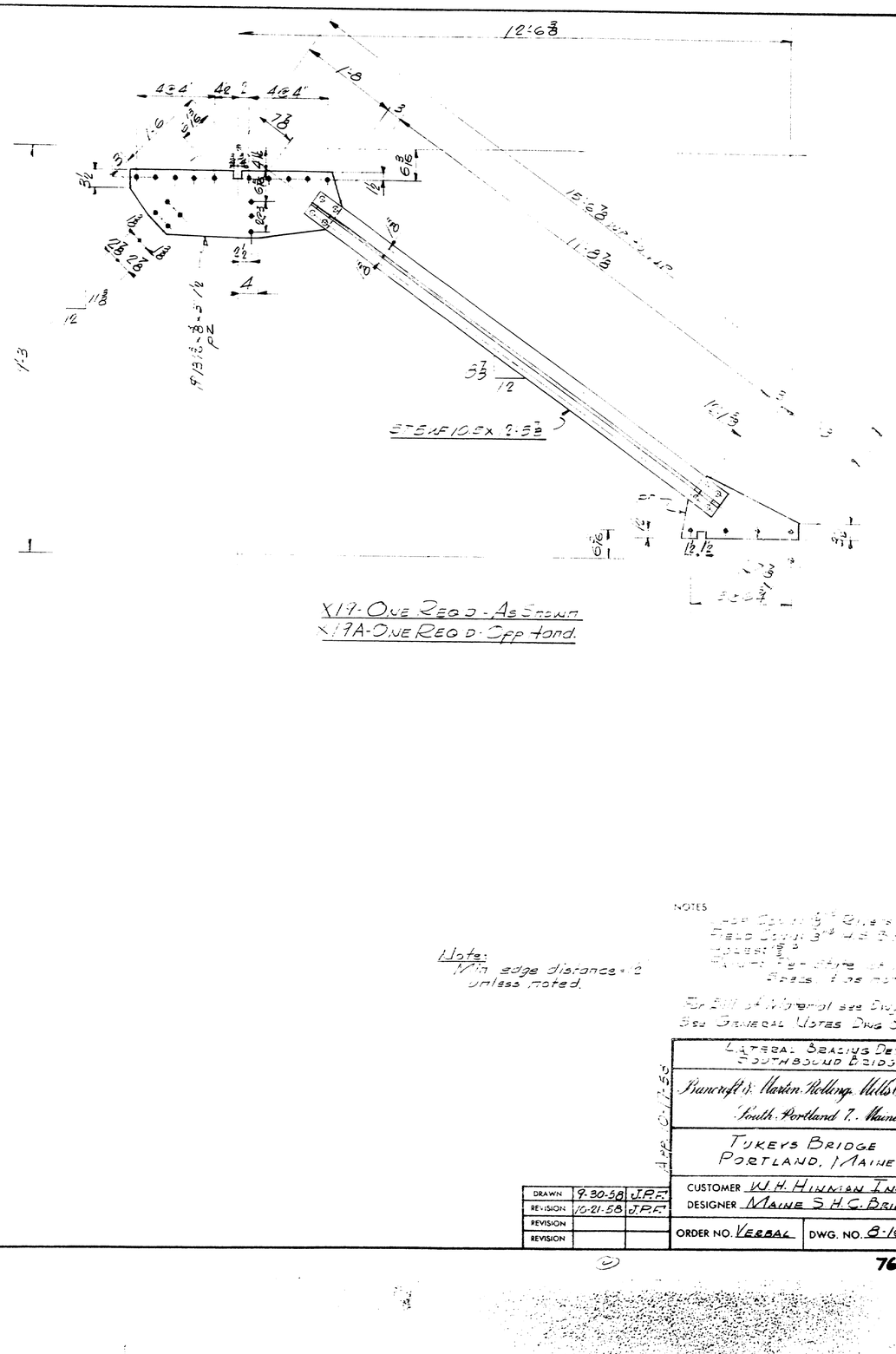
DRAWN	7-29-58	J.P.F.
REVISION	9-21-58	J.P.F.
REVISION		
REVISION		

APP. 10-1-58

76-252

0 1 2 3 4 5 INCHES





Note:
Min edge distance = 2
unless noted.

NOTES

For Bill of Material see Dwg. B-164-580
See General Notes Dwg. B-164-582

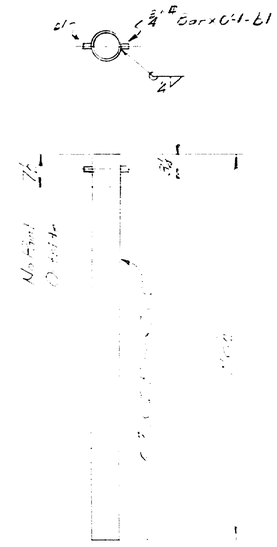
LATERAL BRACING DETAILS SOUTHBOUND BRIDGE	
Bancroft & Martin Rollins Wells Company South Portland 7, Maine	
TUKEYS BRIDGE PORTLAND, MAINE	
CUSTOMER W.H. HINMAN INC.	
DESIGNER MAINE S.H.C. BRIDGE DIV.	
ORDER NO. VERBAL	DWG. NO. B-164-582

DRAWN	9-30-58	J.P.F.
REVISION	10-21-58	J.P.F.
REVISION		
REVISION		

APP. 0-17-55

76-253

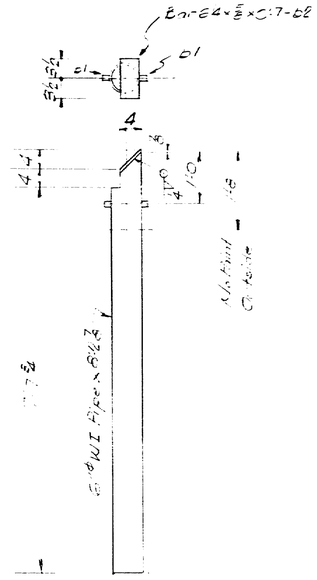
0 1 2 3 4 5 INCHES



DRAIN D1 - 44 REQ'D

NORTHBOUND BRIDGE

SIDEWALK

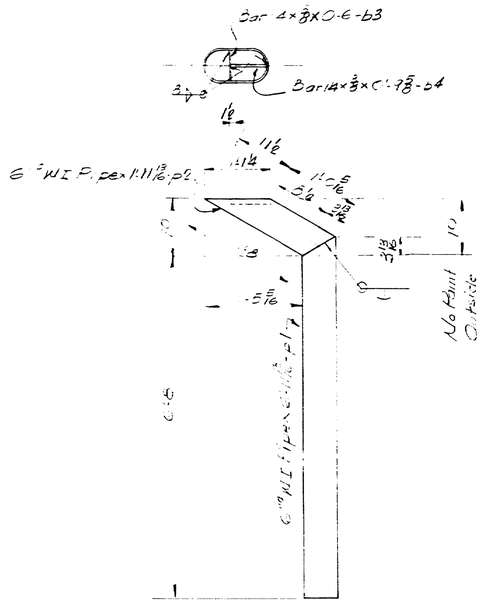


DRAIN D2 - 44 REQ'D.

44 - FOR SOUTHBOUND BRIDGE

22 - FOR NORTH-BOUND BRIDGE

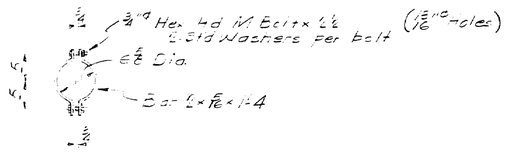
MEDIAN



DRAIN D3 - 22 REQ'D

SOUTHBOUND BRIDGE

CURB

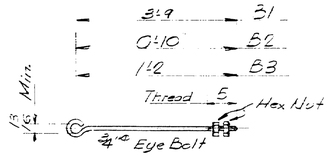


CLAMP DETAILS

17 - REQ'D

66 - SOUTHBOUND BRIDGE

68 - NORTHBOUND BRIDGE



B1 - 44 REQ'D. - For Drains D1 (NORTHBOUND BRIDGE)

B2 - 88 REQ'D. - For Drains D2 (44 - SOUTHBOUND - 44 NORTHBOUND)

B3 - 44 REQ'D. - For Drains D3 (SOUTHBOUND BRIDGE)

SHOP CONNECTIONS WELDED

FIELD CONNECTIONS -

HOLES 13/16"

PAINT - Per State of Maine Spec Paint Drains - Field & Out 10 mils Prep & 1 Coat Inside 20 mils

BILL OF MATERIAL — DWG NO. B-164-583

MARK	NO	MARK	SHAPE	LENGTH	WT	WT/ Unit	REMARKS
D1	22		6" WI Pipe	7 6 1/2			
D2	44		Do	3 5 3		307.	
D3	22		Assembly	7 6	—		
JUMP	176		Do		—		
B1	44		Bar 2 x 5/8	3 4	—		
B2	88		Do	2 10	—		
B3	44		Do	1 2	—		
	44	D1	6" WI Pipe	6 1 3/8		55.	
	22	D2	Do	1 1 1/2		55.	
	44	B1	1" Bar	3 1			
	44	B2	Bar 2 x 5/8	2 7			
	44	B3	Bar 1 x 5/8	1 6			
	44		Do	2 1 3/8			
	44		Do	1 4			
	44		3/4" Eye Bolt	1 2			
	176		3/4" Hex Nuts				
	44		3/4" Hex Hd M Bolts	1 2			
	88		3/4" Washers				
	44		3/4" Bar	1 4 1/2			
	88		Do	1 3			
	44		Do	1 0			
	264		5/8" Holes				

Item 722.123 B

DRAWN	10-1-58	J.P.F.	
REVISION	10-21-58	J.P.F.	
REVISION			
REVISION			

APPROVED

DRAIN DETAILS

Bancroft & Martin Rollins Wells & Company

South Portland 7, Maine

TUKERS BRIDGE
PORTLAND, MAINE

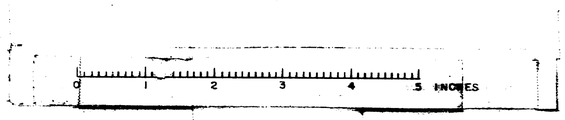
CUSTOMER N.H. HINMAN INC.

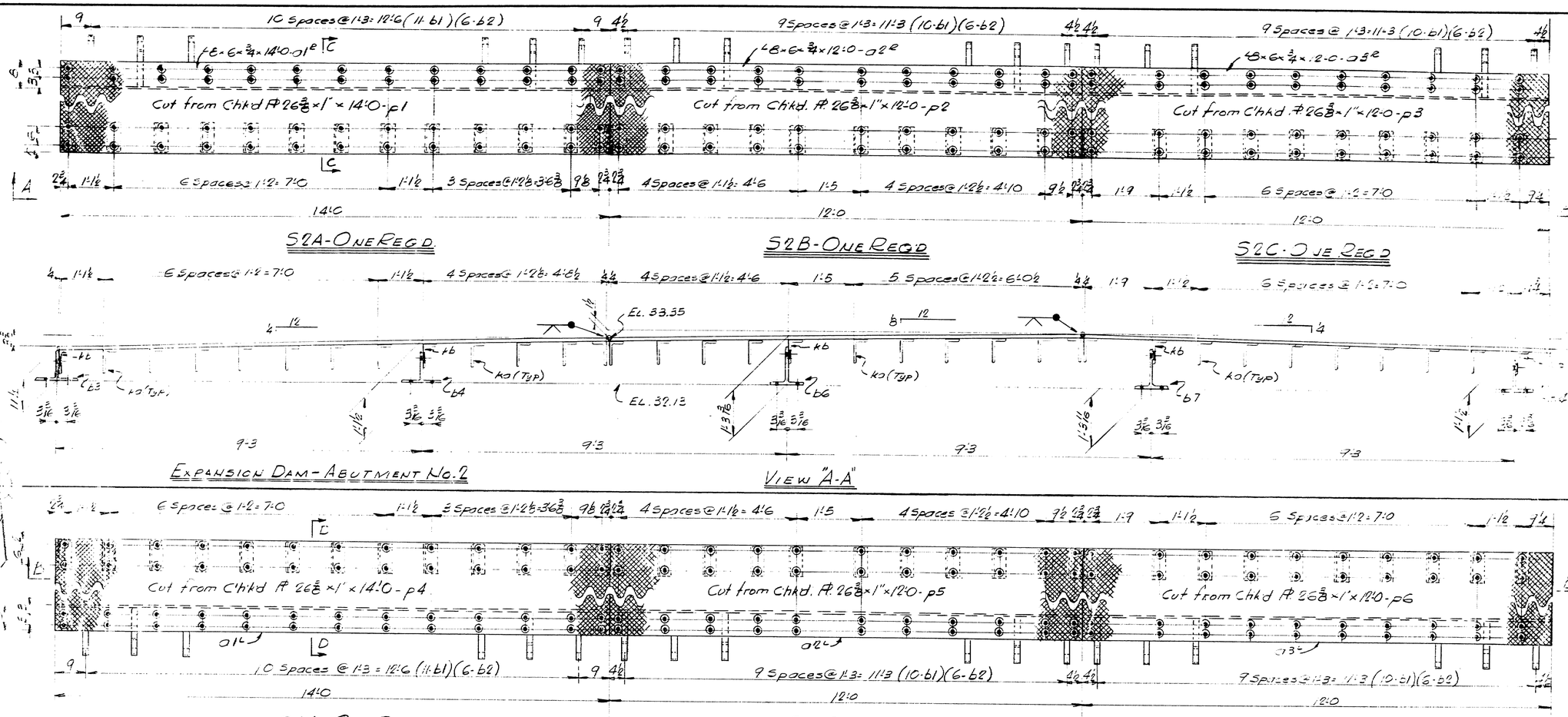
DESIGNER MAINE S.H.C. BRIDGE DIV.

ORDER NO. VERBAL | DWG. NO. B-164-583

D

76-254





Note:
For Details & Sections not shown
see Dwg. No. B-164-585
For Bill of Material see Dwg B-164-585

Southbound Bridge

DRAWN	10-3-58	J.P.F.
REVISION	10-21-58	J.P.F.
REVISION		
REVISION		

Expansion Dams

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

APR 10-7-58

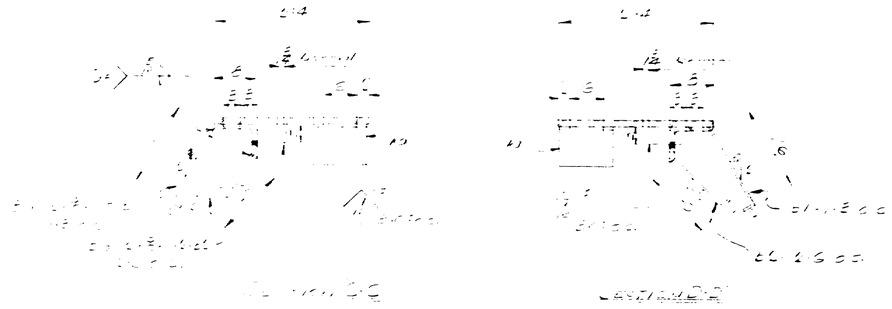
Tukeys Bridge
Portland, Maine

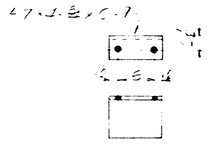
CUSTOMER W. H. Hinman Inc.
DESIGNER Maine S.H.C. Bridge Div.

ORDER NO. Verbal | DWG. NO. B-164-584

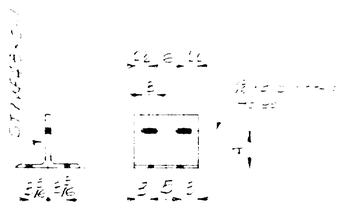
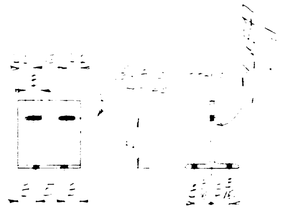
(2)

76-255





K9-Detail

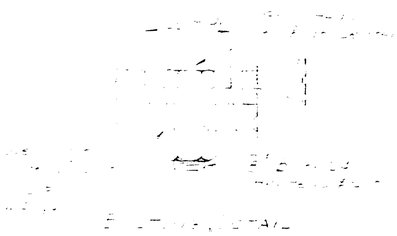
K5-Detail



MARK	NO.	L
C3	1	3 3/4
C4	3	3

C3 Point
Bolt for shipment

MARK	NO.	S
C6	2	2 1/8
C7		2 3/8
C8	1	10 3/8
C9	1	2 1/4

No Point
Bolt for shipment



B-Type Detail

No Point on Lower 18 — 5 — 10 — No Point on Outside

Section (Typ)
Do not paint anchorage clips

INCLUDE
4-PA - PL 8 1/2 x 1/2 x 0'-11
4-PB - PL 10 1/4 x 1/2 x 0'-11
26-PC - PL 11 x 1/2 x 0'-11
No Fabrication - No Point
To be field welded

SHIP MARK	NO	MARK	SHAPE	LENGTH	WT	REMARKS
C4						
C3	1					
C5	1					
C6	1					
C8	1					
C9	1					

BILL OF MATERIAL DWG NO 8-164-S35

SHOP CONNECTIONS
FIELD CONNECTIONS
HOLES
PAINT

CONSTRUCTION PLANT DIVISION
Bancroft & Martin Rolling Mills Company
South Portland, Maine

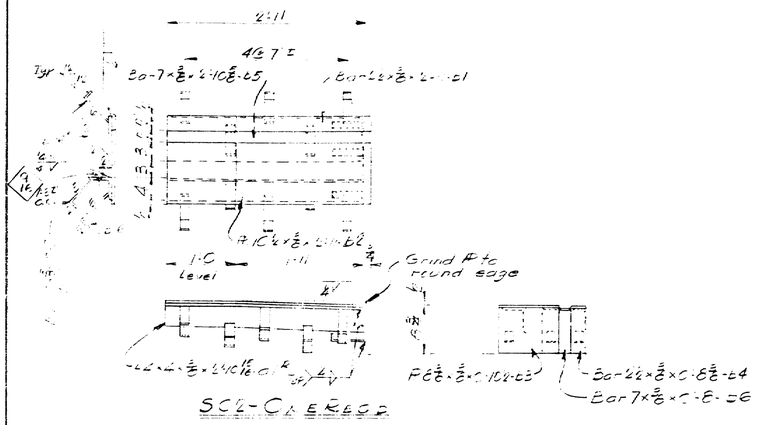
T. KEY'S BRIDGE
PORTLAND, MAINE

CUSTOMER M. M. Hamblin, Inc.
DESIGNER Maine S. P. Bridge Div.

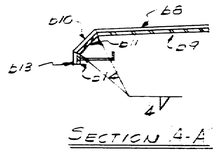
ORDER NO. VERBAL DWG. NO 8-164-S35

DRAWN	10-5-58	J.F.F.
REVISION		
REVISION		
REVISION		

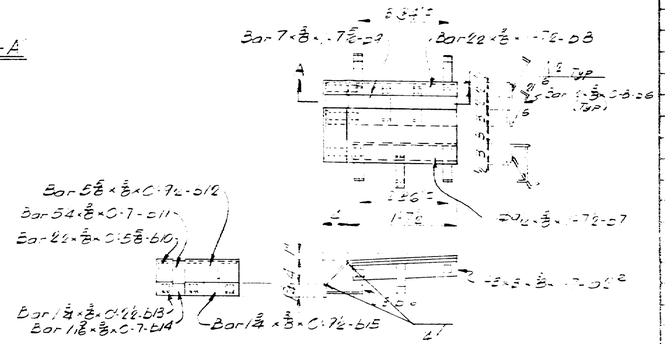
76-256



SC4 - CURB REQD



SECTION 4-A

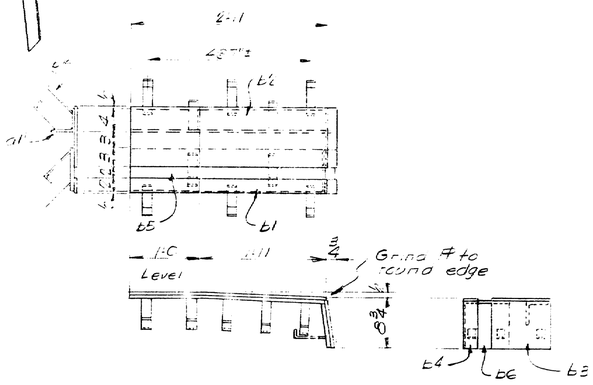


SM2 - MEDIAN REQD

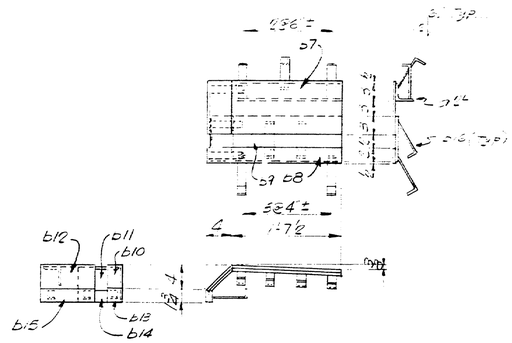
CURB

EXPANSION DAMS - ABUTMENT NO. 2

MEDIAN



SC1 - ONE REQD



SM1 - ONE REQD

CURB

EXPANSION DAMS - ABUTMENT NO. 1

MEDIAN

SHIP MARK	NO	MARK	SHAPE	LENGTH	WT	REMARKS
SC1			ASSEMBLY	2 .1	-	
SC2			Do	2 11	-	
SM1	1		Do	.12	-	
SM2	1		Do	.12	-	
	2	b1	Bar 22 × ⅜	2 11		
	2	b2	PL 12 × ⅜	2 11		
	2	b3	PL 3⅜ × ⅜	0 10½		
	2	b4	Bar 12 × ⅜	0 6⅜		
	2	b5	Bar 7 × ⅜	2 0⅜		
	2	b6	Do	0 3		
	2	b7	PL 12 × ⅜	2		
	2	b8	Bar 12 × ⅜	2		
	2	b9	Bar 7 × ⅜	7⅛		
	2	b10	Bar 22 × ⅜	0 5⅜		
	2	b11	Bar 5½ × ⅜	0 7		
	2	b12	Bar 5⅜ × ⅜	0 7½		
	2	b13	Bar ¾ × ⅜	0 2½		
	2	b14	Bar 1⅛ × ⅜	0 7		
	2	b15	Bar 1¾ × ⅜	0 7½		
	4	b16	Bar 2 × ⅜	0 3		
	2	b17	Do	0 7		
	2	b18	PL 4 × ⅜	0 1⅛		
	2	b19	PL 5 × ⅜	1 7		

ITEM 12 702.283

SOUTHBOUND [illegible]

[illegible] Connection [illegible]

[illegible] Connection [illegible]

[illegible] 45° Do [illegible]

[illegible] Bar 54 [illegible] Bolts Each.

Paint Top side of Expansion Dams Only

EXPANSION DAMS

Drawn at H. Harden Hilling Hills & Company

South Portland T. Maine

TUKEYS BRIDGE
PORTLAND, MAINE

DRAWN	10-7-58	J.P.F.
REVISION	10-27-58	J.P.F.
REVISION		
REVISION		

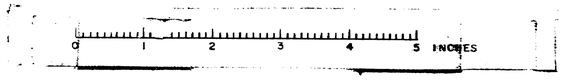
CUSTOMER W. H. HUMMAN INC.

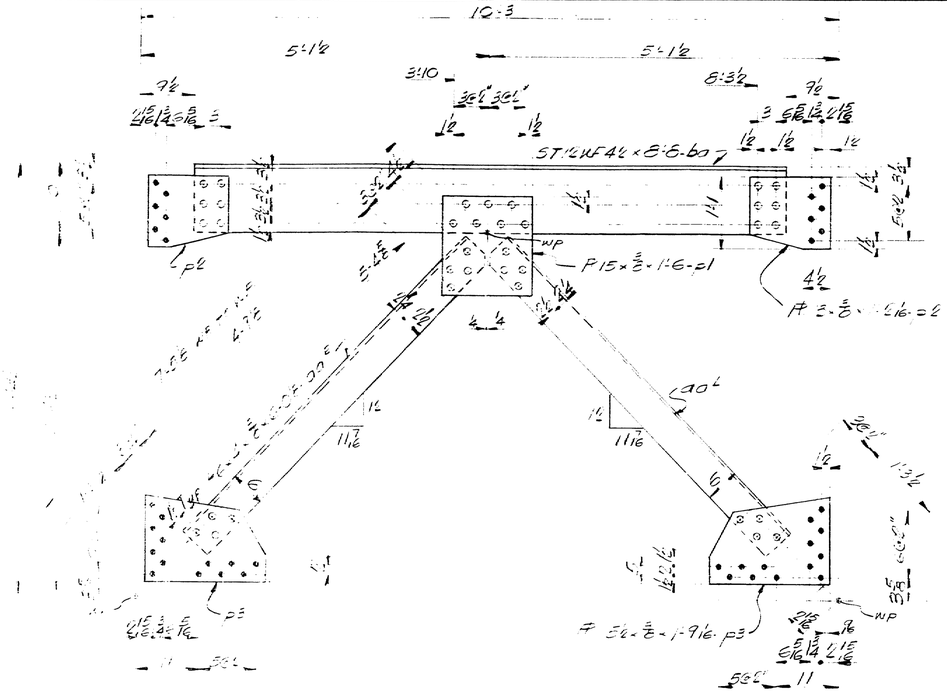
DESIGNER MAINE S.H.C. BRIDGE DIV.

ORDER NO. VERBAL | DWG. NO. 8-164-586

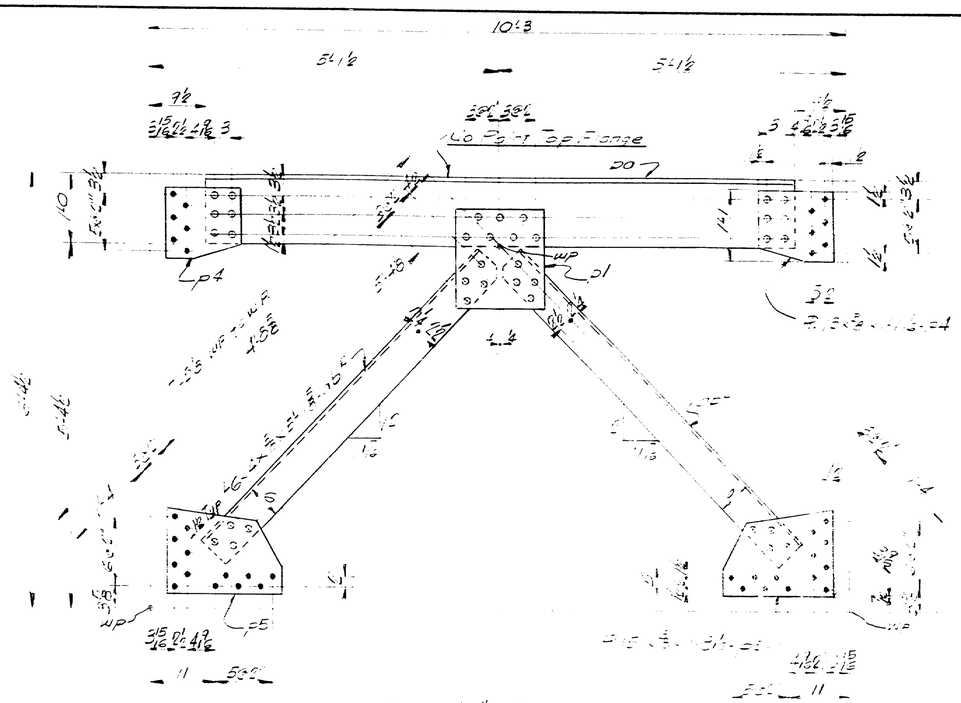
APP. 10-27-58

76-257

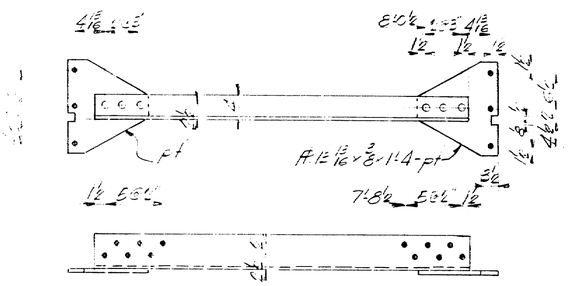


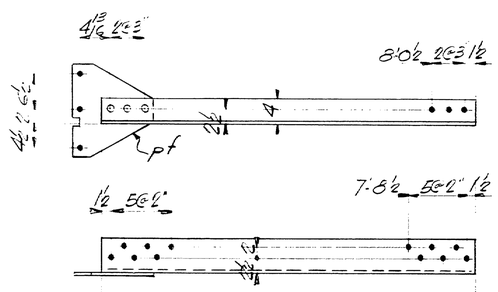


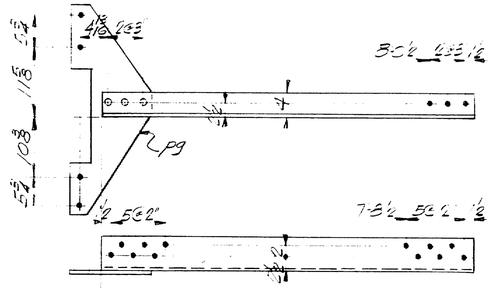
PANEL C - 72 REQ'D

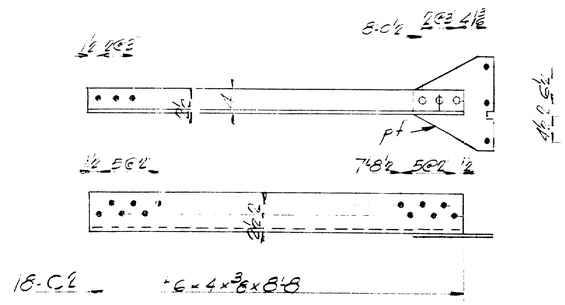


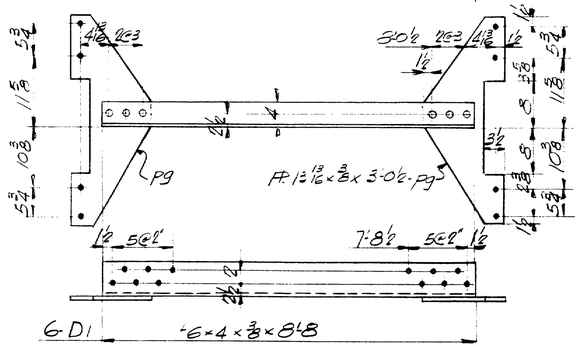
PANEL "D" - 20 REQ'D.

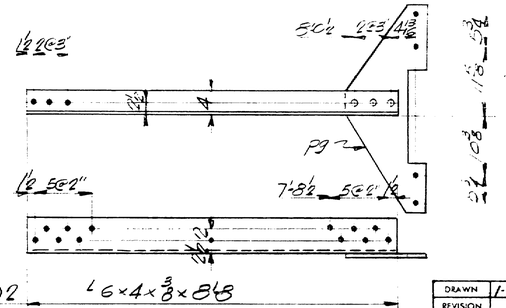












NOTES:

DRAWN	1-19-59	J.P.F.
REVISION		
REVISION		
REVISION		

UPPER CHORD DETAILS
NORTHBOUND BRIDGE

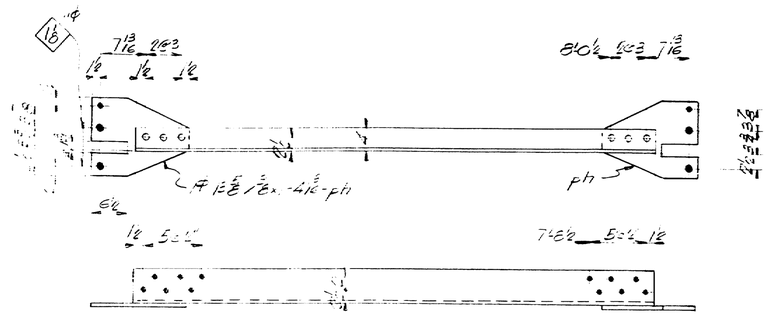
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEYS BRIDGE
PORTLAND, MAINE

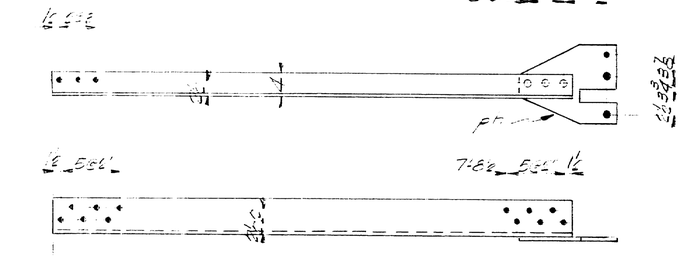
CUSTOMER W. H. HINMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DN.

ORDER NO. VERBAL | DWG. NO. 8-164-587

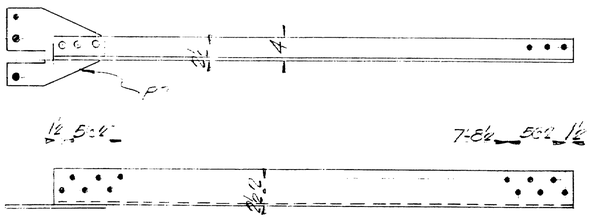
76-258



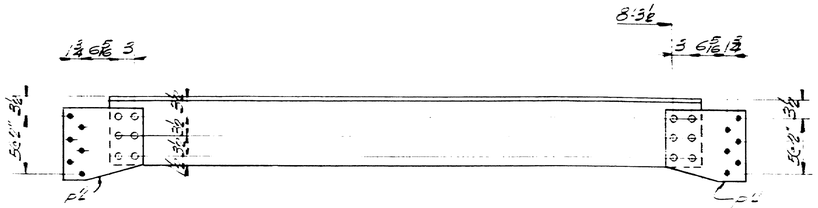
4-D4 — L6 x 4 x 5/8 x 8'-8



4-D5 — L6 x 4 x 5/8 x 8'-8



4-D6 — L6 x 4 x 5/8 x 8'-8



12-S1 — ST 12 WF 38 x 8'-8

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	WT. DEDUCT	REMARKS
PANEL C	72		ASSEMBLY	0	08		
PANEL D	60		"	9	10		
	56	b0	ST 12 WF 40	8	8		
	44	a0	PL 1/2 x 1'-3	6	06		
	40	j0	"	5	1		
	72	c1	PL 5/8 x 3	1	6		
	38	c2	PL 3/8 x 8	1	4		
	44	c3	PL 15/16 x 3/8	1	0		
	40	c4	PL 5/8 x 8	1	1		
	40	c5	PL 5/8 x 3	1	5		
C1	36		L 6 x 4 x 3/8	3	8		
C2	18		"	3	8		
C3	18		"	3	8		
D1	6		"	3	8		
D2	3		"	3	8		
D3	3		"	3	8		
D4	4		"	2	8		
D5	2		"	4	8		
D6	2		"	3	8		
	28	c6	PL 3/8 x 3/8	1	2		
	12	c7	"	3	0		
	4	c8	PL 5/8 x 3	1	1 1/16		
E1	22		L 7 x 4 x 5/8	3	8		
	1584	SHOP	3/4" Ø BOLTS		24		
	2016	"	"		1 3/3		
* FIELD	2578		3/4" Ø BOLTS	0	04		
"	1261		"	0	1 3/4		
"	72		"	0	3		
"	540		"	0	3 4		
"	9		"	0	3 3/4		
"	30		"	0	1		
"	6		"	0	1/4		
"	12		"	0	1/2		
"	7604		1/2" THICK WASHERS		—		
"	1008		3/4" THICK WASHERS		—		
			* ACTUAL JOINT				
			ITEM 752-1033				

Bill of Material also on Sht. No. B-64-587

SHOP CONNECTIONS: 3/4" Ø BOLTS.
FIELD CONNECTIONS: 3/4" Ø BOLTS.
HOLES: 15/16" Ø unless noted.
PAINT: See Specs. for Painting Steel. Ends not painted.
See General Notes Dwg. B-64-52

CROSS FRAME DETAILS
NORTHBOUND BRIDGE

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEYS BRIDGE
PORTLAND, MAINE

CUSTOMER N. H. HILL INC.
DESIGNER MAINE D.H.C. BRIDGE DIV.

ORDER NO. VERBAL — DWG. NO. B-164-588

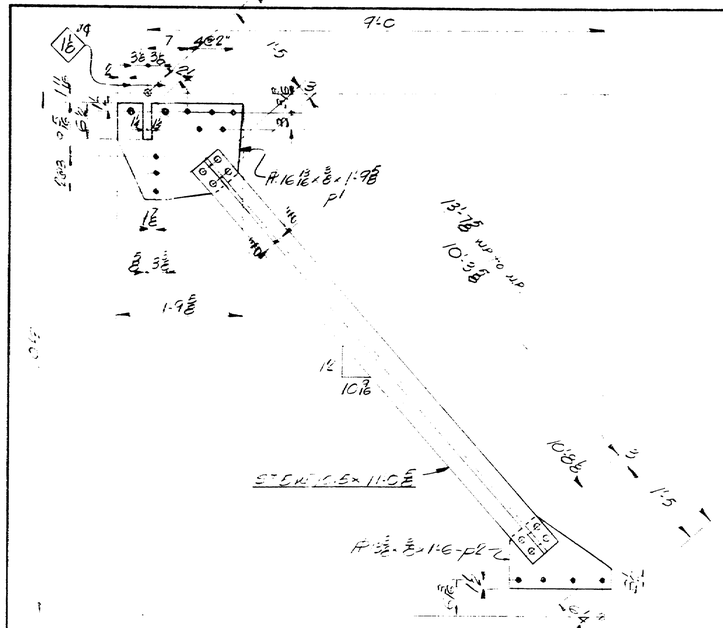
DRAWN	1-17-59	J.P.F.
REVISION	2-13-59	J.P.F.
REVISION		
REVISION		

APPROVED

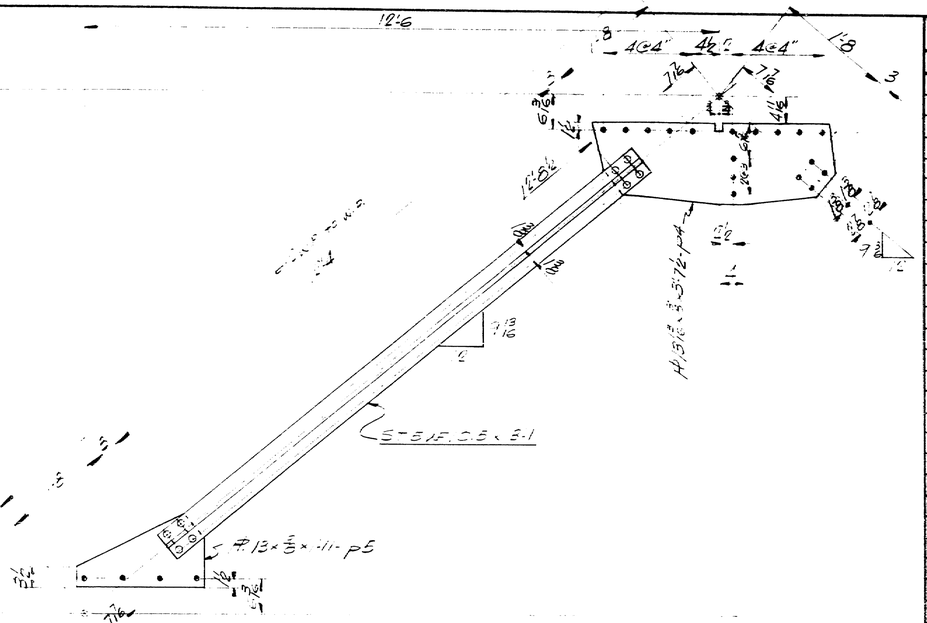
0 1 2 3 4 5 INCHES

PRINTED BY SPAULDING-MOSS CO., BOSTON, MASS. RE-ORDER NO. P-4

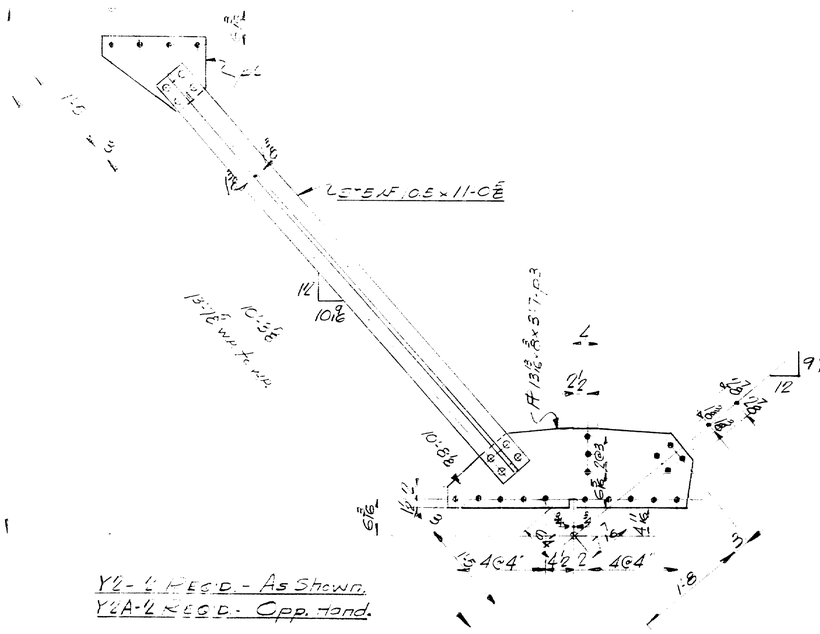
76-259



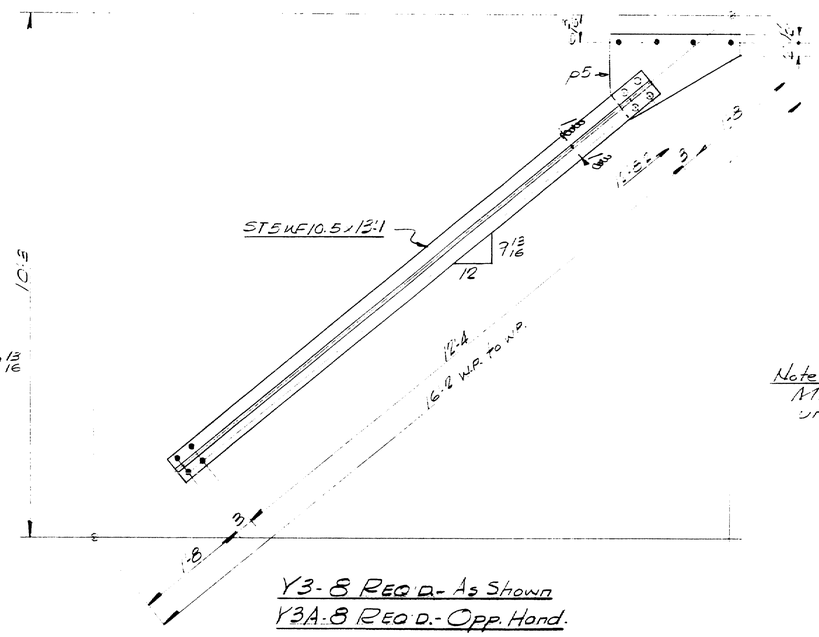
Y1-4 Req'd.- As Shown
Y1A-4 Req'd - Opp Hand



Y4-4 Req'd.- As Shown
Y4A-4 Req'd- Opp Hand



Y2-4 Req'd. - As Shown.
Y2A-4 Req'd. - Opp. Hand.



Y3-8 Req'd- As Shown
Y3A-8 Req'd.- Opp. Hand.

SHIP MARK	NO	MARK	SHAPE	LENGTH	WT.	WT. PER PIECE	REMARKS
Y1	2		ST5WF10.5	11 0			
Y1A	2			11 0			
Y2	2			11 0			
Y2A	2			11 0			
Y3	8			13 1			
Y3A	8			13 1			
Y4	4			13 1			
Y4A	4			13 1			
Y5	4			13 1			
Y5A	4			13 1			
Y6	1			13 1			
Y6A	1			13 1			
Y7	2			1 0			
Y7A	2			1 0			
Y8	2			1 0			
Y8A	2			1 0			
	4	B1	PL 1/2 x 1'-6 x 1'-6			22.	
	8	B2	PL 1/2 x 1'-6 x 1'-0			15.	
	4	B3	PL 1/2 x 1'-6 x 0'-6	5 7		10.	
	8	B4	" "	3 7½		05.	
	14	B5	PL 1/2 x 3/8	1 1		33.	
	3	B6	" "	6 2		14.	
	6	B7	PL 2 1/2 x 3/8	3 5		7.	
	4	B8	PL 1/2 x 3/8	6 0		12.	
	4	B9	PL 3 1/2 x 3/8	1 7		11.	
	4	B10	" "	1 6		24.	
	4	B11	PL 1/2 x 3/8	3 04		12.	
	138		3/4" DIAM. STUDS	0 4			3/4" Dia. - 6"

ITEM 104.03.3

Material List also applies Dwg. B-164-590

SHOP CONNECTIONS: 7/8" Bolts
FIELD CONNECTIONS: 7/8" A325 Bolts
HOLES: 7/8" Ø unless noted.
PAINT: Per State of Maine Specs. 5.05 noted.
See GENERAL NOTES Dwg B-164-52

Note:
Min. edge distance = 1"
unless noted.

LATERAL BRACING DETAILS
NORTHBOUND BRIDGE

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEYS BRIDGE
PORTLAND, MAINE

CUSTOMER W. H. Hinman Inc.
DESIGNER Maine S.H.C. Bridge Div.

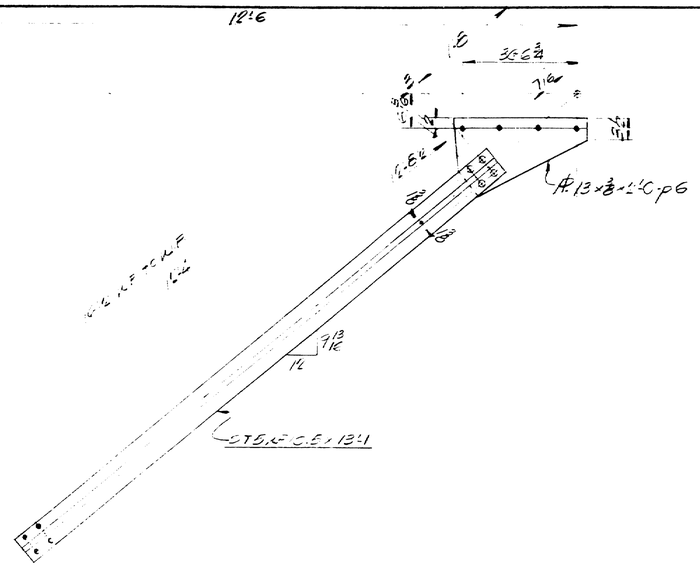
ORDER NO. VERBAL | DWG. NO. B-164-589

DRAWN	1-22-59	JPF
REVISION		
REVISION		
REVISION		

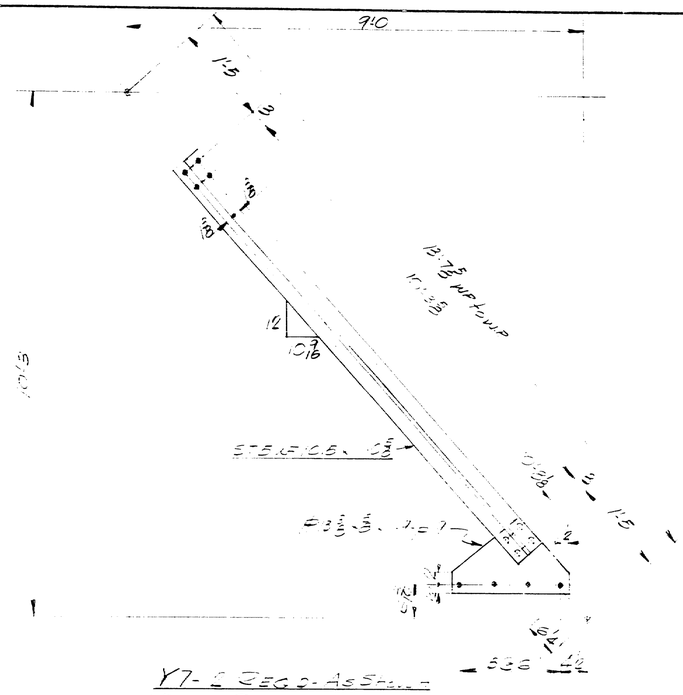
AFO 4/17-57

(6)

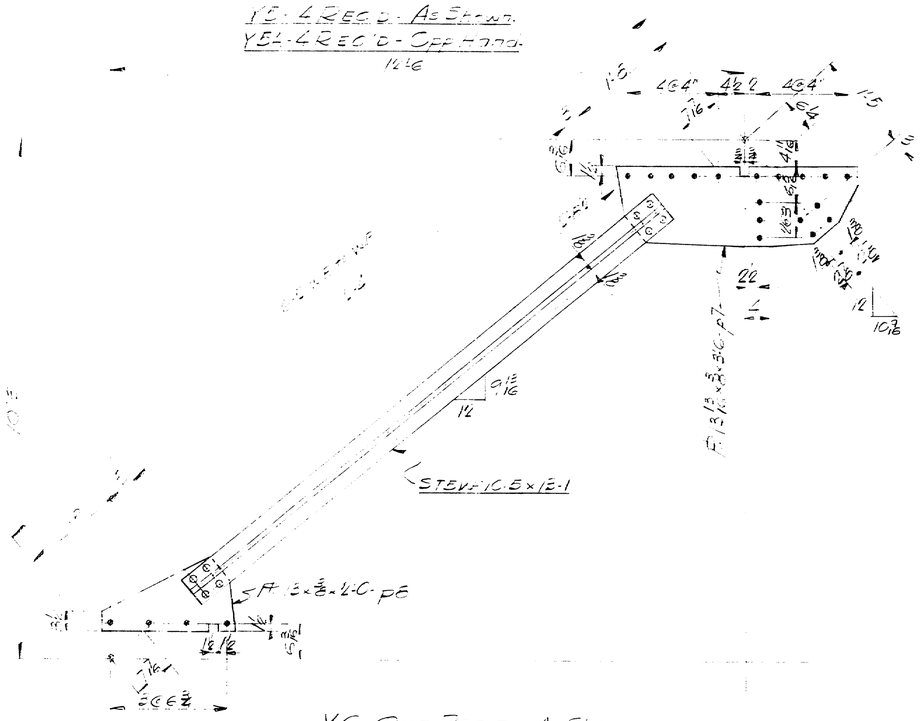
76-260



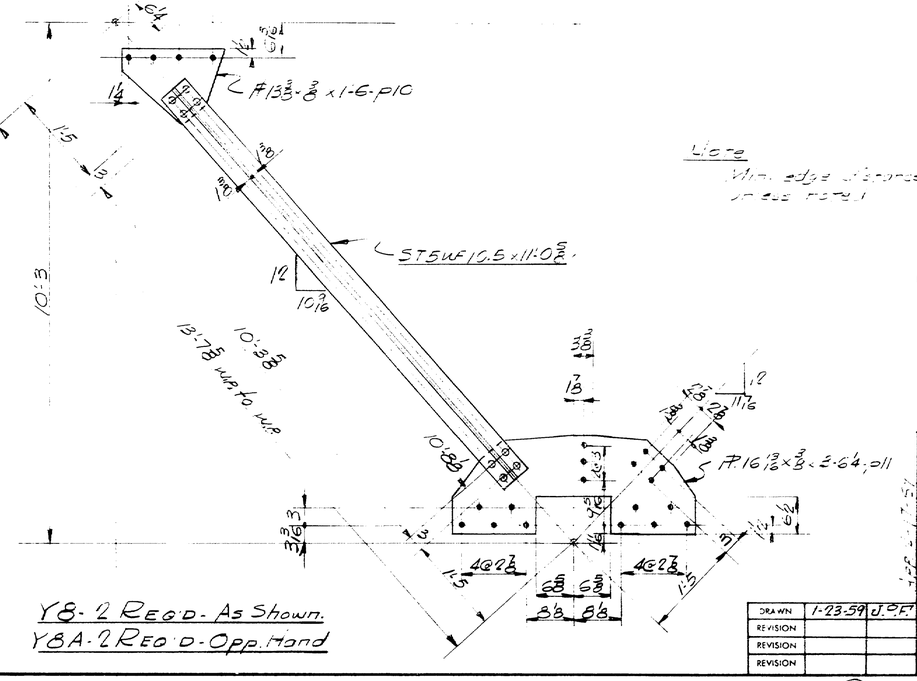
Y5 - 1 REQ'D - AS SHOWN.
Y5A - 1 REQ'D - OPP HAND.
12'-6"



Y7 - 1 REQ'D - AS SHOWN.
Y7A - 1 REQ'D - OPP HAND.
9'-0"



Y6 - ONE REQ'D. - AS SHOWN.
Y6A - ONE REQ'D. - OPP HAND.



Y8 - 2 REQ'D - AS SHOWN.
Y8A - 2 REQ'D - OPP HAND.

Note
When edge distance is of this note.

NOTES
Shop layout & details
Welding & field bolts
Holes 13/16"
Paint per state of Maine
Specifications

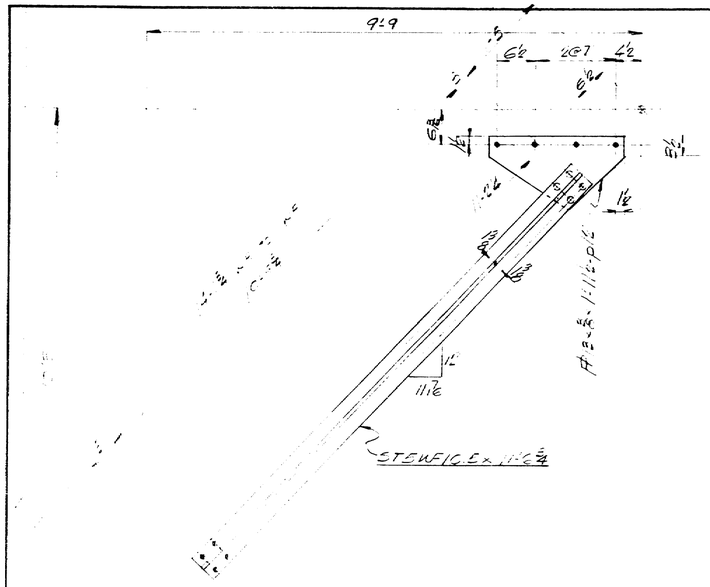
For Shop Notes, see Dwg S-164-589
For General Notes Dwg S-164-52

	Lateral Roll Details North 90° to Base
	Bancroft & Martin Rolling Mills Company South Portland 7, Maine
	Tukey's Bridge Portland, Maine
CUSTOMER	W. H. Hinman Inc.
DESIGNER	Maine S.H.C. Bridge Div.
ORDER NO.	Verbal
DWG. NO.	S-164-590

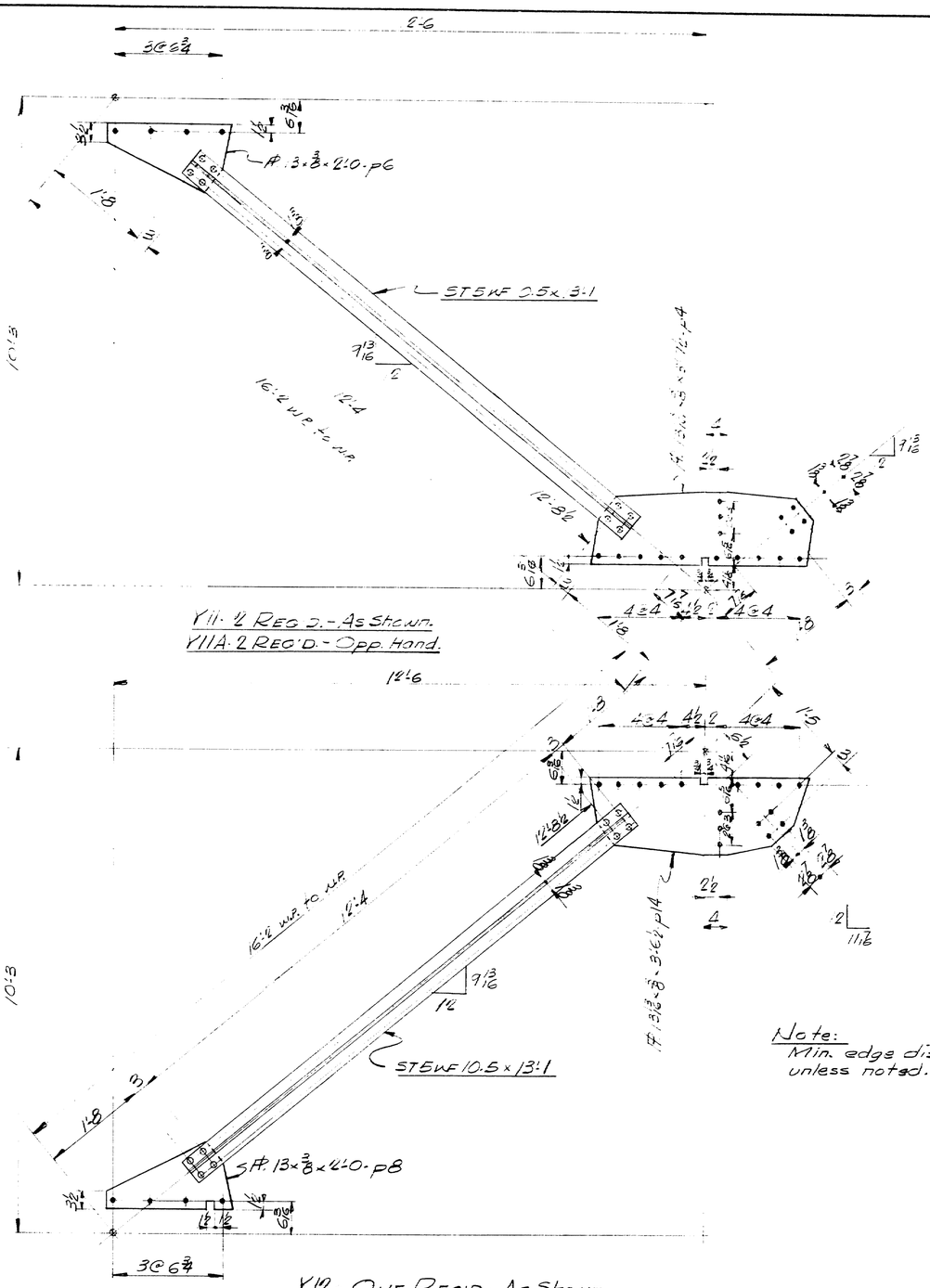
DRAWN	1-23-59	J.S.F.
REVISION		
REVISION		
REVISION		

76-261

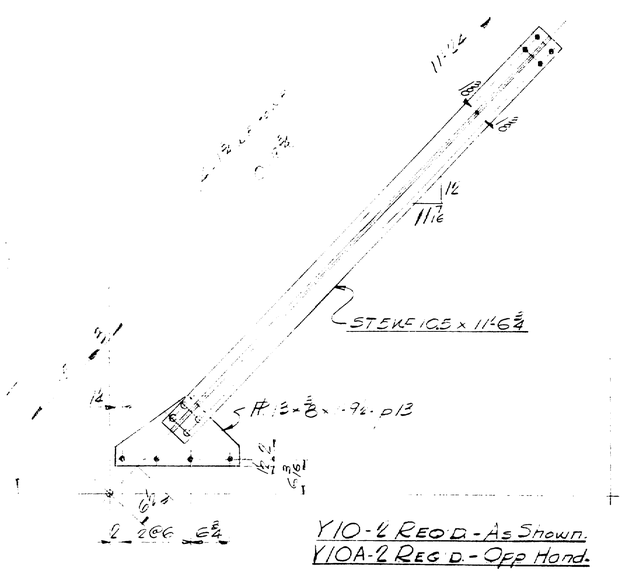
0 1 2 3 4 5 INCHES



Y9-2 REQ'D.-As Shown.
Y9A-2 REQ'D.-Opp Hand.



Y11-2 REQ'D.-As Shown.
Y11A-2 REQ'D.-Opp. Hand.



Y10-2 REQ'D.-As Shown.
Y10A-2 REQ'D.-Opp Hand.

Note:
Min. edge distance = 1½" unless noted.

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	WT. PER PC.	REMARKS
Y9	2		STSWF10.5	11'- 6¾			
Y9A	2			11'- 6¾			
Y10	2			11'- 6¾			
Y10A	2			11'- 6¾			
Y11	2			3'- 1			
Y11A	2			3'- 1			
Y12	1			3'- 1			
Y12A	1		STSWF10.5	3'- 1			
	4	±4	PL 3 13/16 x ⅜	3'- 7½		20.	
	4	±6	PL 13 x ⅜	6'- 0		17.	
	2	±5	"	12'- 0		20.	
	4	±4	"	1'- 8		15.	
	4	±3	"	1'- 0		11.	
	2	±4	PL 3 3/16 x ⅜	3'- 1½		2.	
	30	±4P	⅞" Ø H.S. BOLTS	0'- 2½			36 = 5'- 10

ITEM 702-103 3

SHOP CONNECTIONS: ⅞" Ø H.S. BOLTS
FIELD CONNECTIONS: ⅞" Ø H.S. BOLTS
HOLES: 15/16" Ø
PAINT: Per State of Maine Specs & as noted.

SEE GENERAL NOTES DWG B-164-52

DRAWN	1-23-59	J.P.F.
REVISION		
REVISION		
REVISION		

LATERAL BRACING DETAILS
NORTHBOUND BRIDGE

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TURKEYS BRIDGE
PORTLAND, MAINE

CUSTOMER W.H. HINMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.

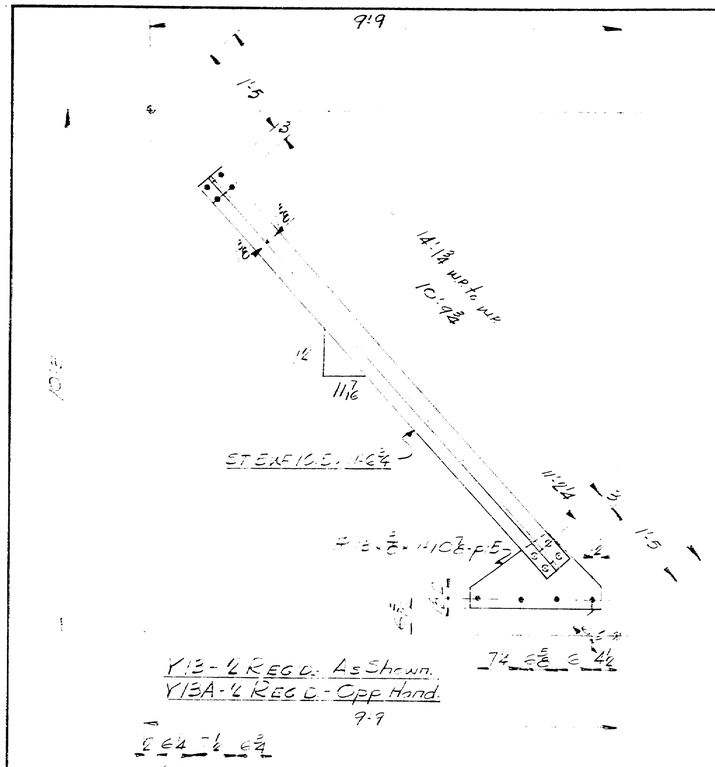
ORDER NO. VERBAL
DWG. NO. B-164-S91

APP'D 1-27-59

D

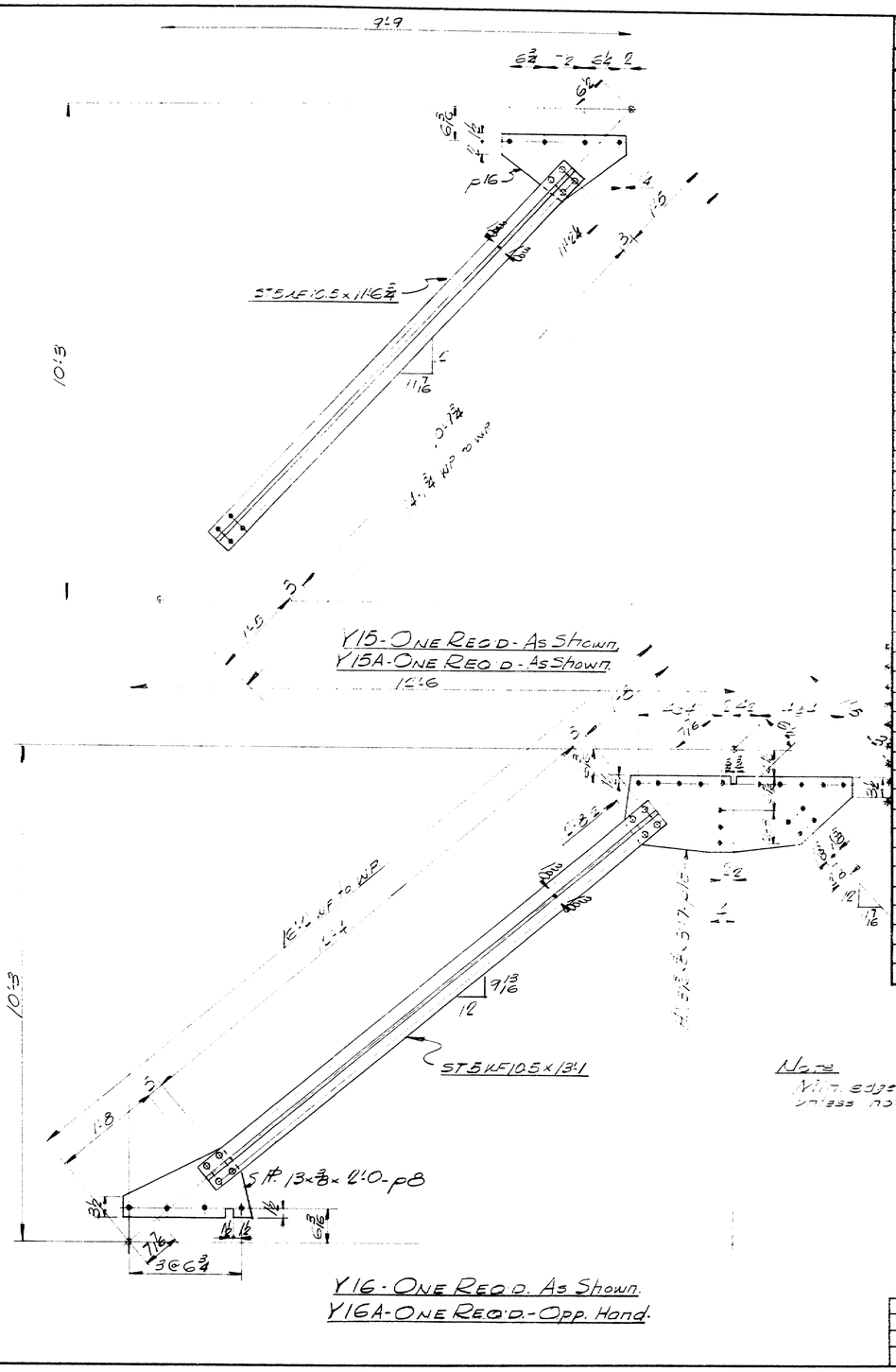
76-262

0 1 2 3 4 5 INCHES



Y13 - 4 Req'd. As Shown.
Y13A - 4 Req'd. - Opp Hand.

Y14 - One Req'd - As Shown
Y14A - One Req'd - Opp Hand



Y15 - One Req'd - As Shown.
Y15A - One Req'd - As Shown.

Y16 - One Req'd. As Shown.
Y16A - One Req'd - Opp. Hand.

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT	M.T. EDGE	REMARKS
Y3	2		STS WF 10.5	1' 6¾			
Y3A	2			1' 6¾			
Y4	1			1' 6¾			
Y4A	1			1' 6¾			
Y15	1			1' 6¾			
Y15A	1			1' 6¾			
Y6	1			3' 1			
Y6A	1			3' 1			
Y7	1			5' 3			
Y7A	1			5' 3			
Y5	1			5' 3			
Y5A	1			5' 3			
Y9	1			5' 4			
Y9A	1			5' 4			
Y10	4			3' 1			
Y10A	4		STS WF 10.5 x	3' 1			
	8	P8	PL ⅜ x	1' 11		3	
	2	P17	PL ⅝ x ⅜ x	3' 6		7	
	8	P8	PL ⅜ x	6' 0		16	
	4	P15	Do	1' 0⅝		4	
	4	P16	Do	1' 1⅛		4	
	2	P17	PL 6 1/16 x ⅝ x	3' 64		20	
	4	P3	PL ⅝ x ⅜ x	3' 7		21	
	2	P17	Do	3' 6		7	
	8	P20	Do	0' 1⅛		1	
	168	SHOP	¾" ø RIVETS	0' 2¼			30# per 100
FIELD	68		⅞" ø H.S. BOLTS	0' 2¼			30# per 100
Do	168			0' 2¾			30# per 100
Do	28			0' 3			30# per 100
Do	52			0' 3¼			30# per 100
Do	72			0' 3¾			30# per 100
Do	48			0' 4			30# per 100
Do	24		⅞" ø H.S. BOLTS & HARD WASHERS	0' 4¼			30# per 100
Do	168		¾" ø CUT WASHERS	—			
Do	152		¾" ø HARD WASHERS	—			

* Actual Count

ITEM 702-1332

Material List also covers Dwg. 8-164-593

SHOP CONNECTIONS: ¾" ø Rivets
FIELD CONNECTIONS: ⅞" ø H.S. Bolts
HOLES: 13/16" ø
PAINT: Per Specs. of this Project.

See GENERAL NOTES Dwg. 8-164-592

Note
Min. edge distance = 1½" unless noted.

LATERAL BRACING DETAILS
NORTHBOUND BRIDGE

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TYKEYS BRIDGE
PORTLAND, MAINE

CUSTOMER W. H. HINMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DN.

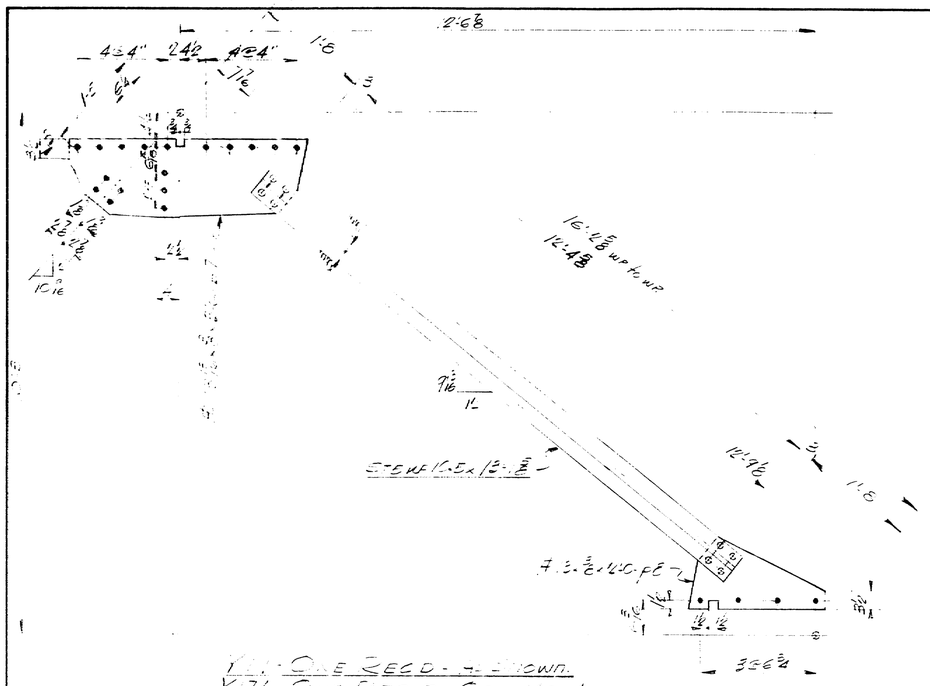
ORDER NO. VERBAL | DWG. NO. 8-164-592

DRAWN	1-24-57	J.P.F.
REVISION		
REVISION		
REVISION		

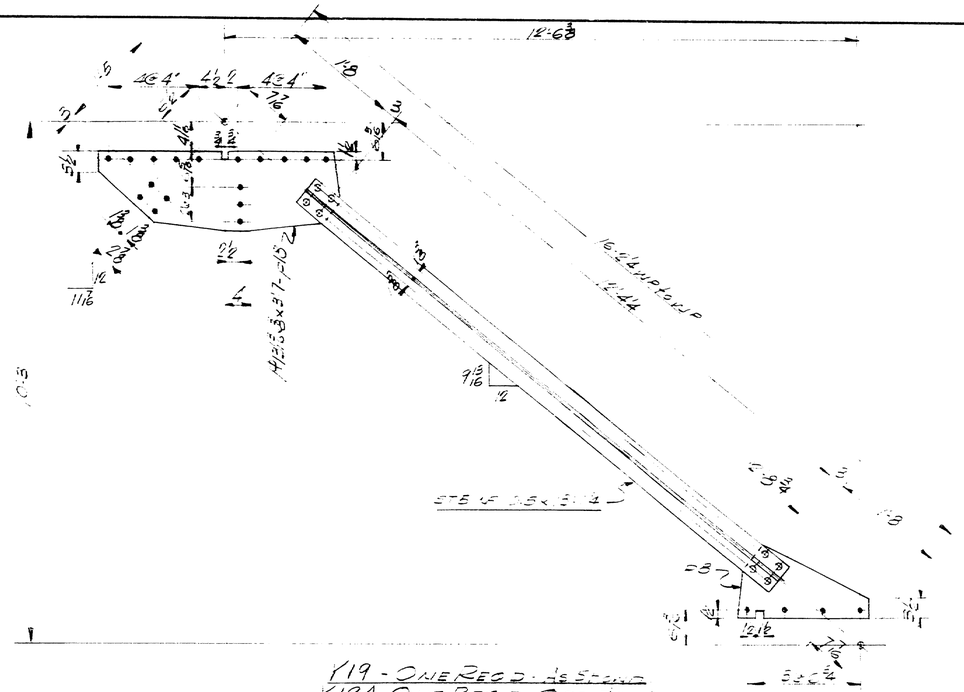
Apr 2-17-57

5

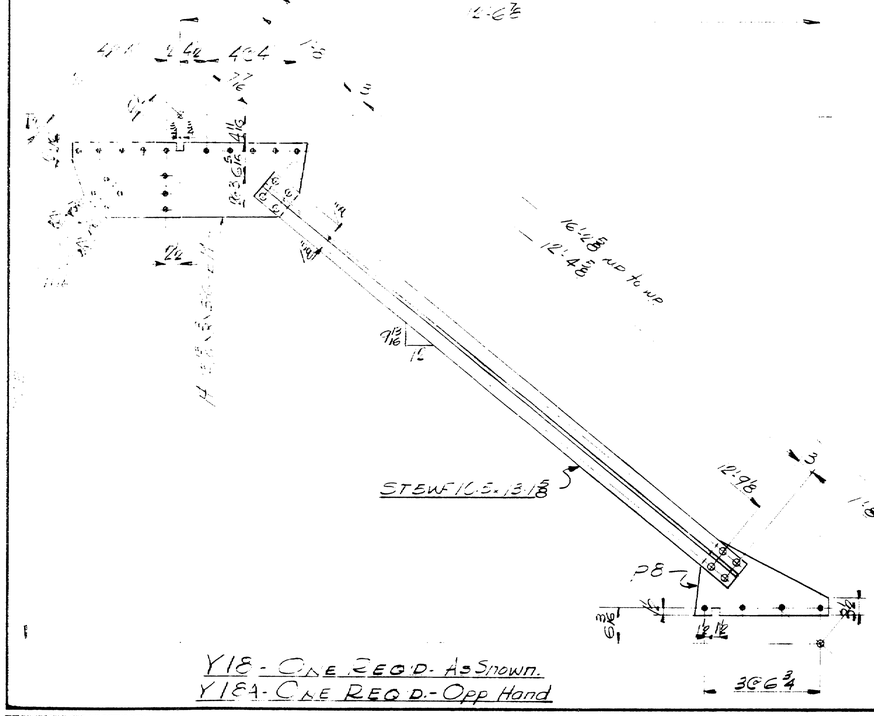
76-263



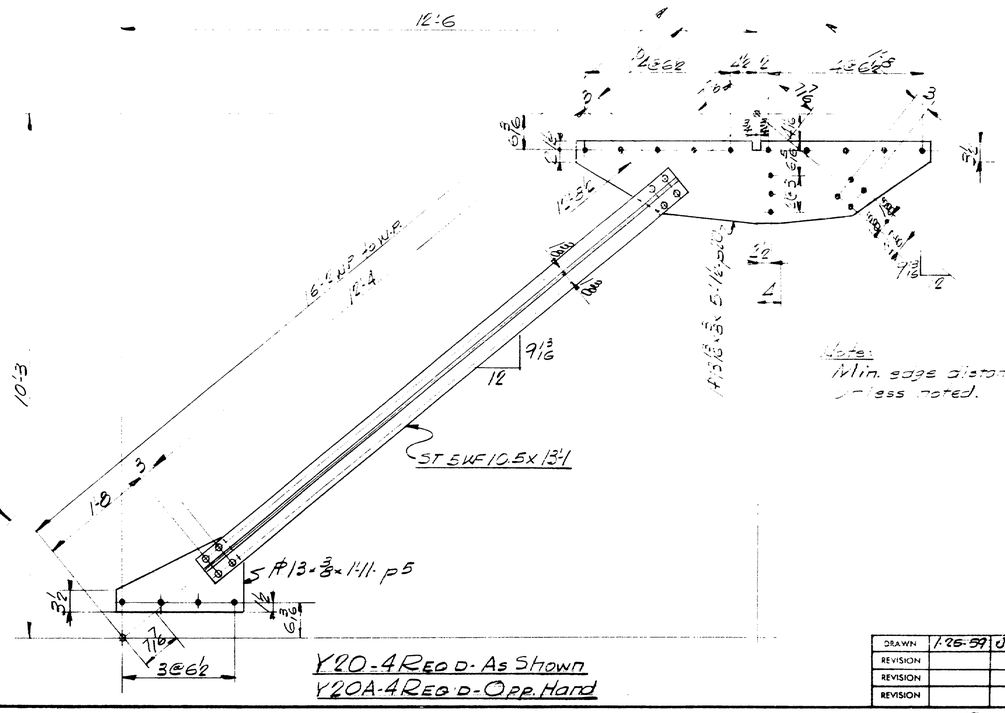
Y17 - One Req'd. As Shown.
Y17A - One Req'd. Opp Hand



Y19 - One Req'd. As Shown
Y19A. One Req'd. Opp Hand



Y18 - One Req'd. As Shown.
Y18A - One Req'd. - Opp Hand



Y20 - 4 Req'd. As Shown
Y20A - 4 Req'd - Opp. Hand

NOTES:

Note:
Min. edge distance 2" unless noted.

See General Notes Dwg. 8-164-S92
For Drainage Notes Dwg. 8-164-S2

DRAWN	1-26-59	J.P.F.
REVISION		
REVISION		
REVISION		

APPROVED

GENERAL BOLT & DETAILS
NORTH BOUND BRIDGE

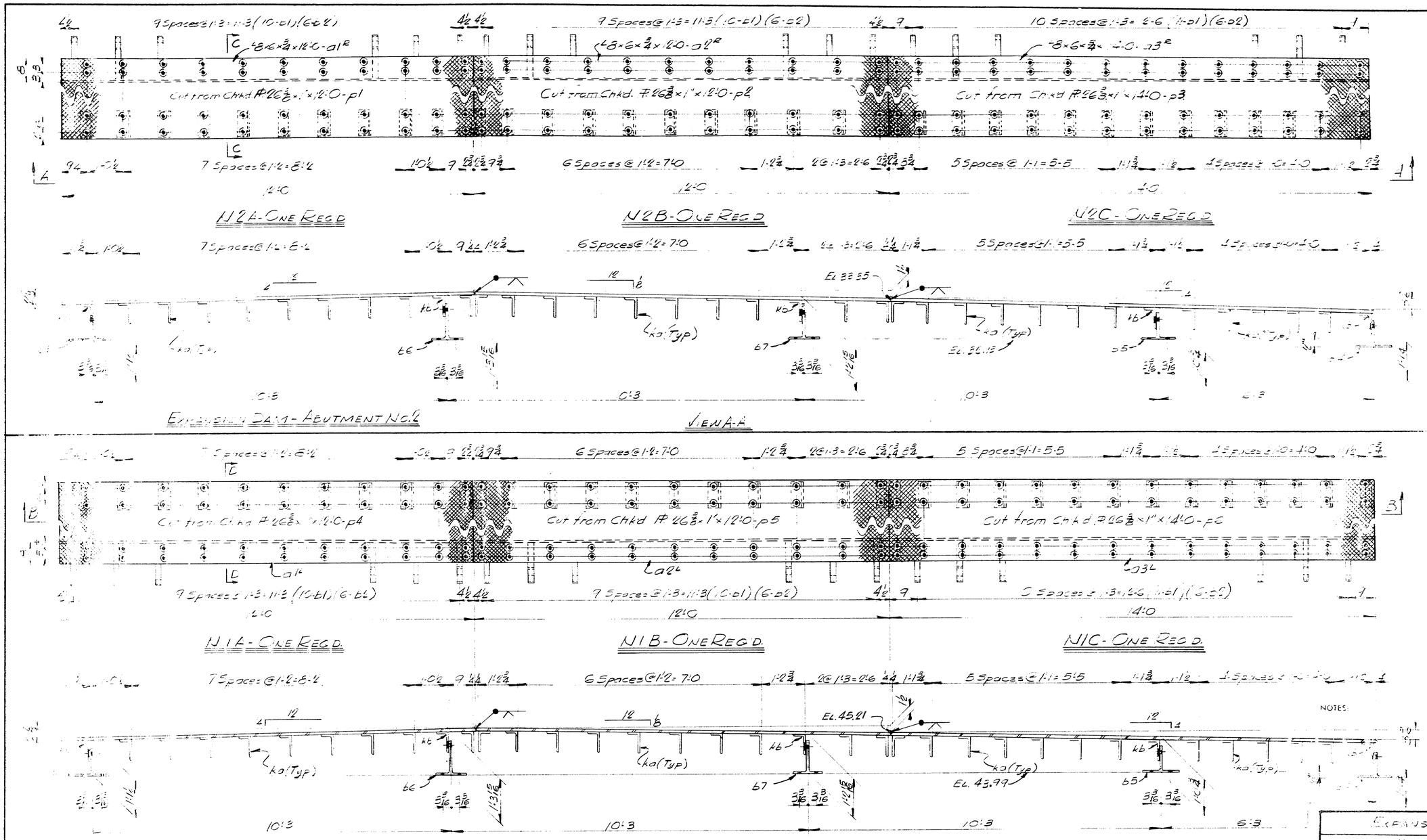
Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

TUKEYS BRIDGE
PORTLAND MAINE

CUSTOMER W. H. HINMAN INC.
DESIGNER MAINE S.H.C. BRIDGE DIV.

ORDER NO. VERBAL | DWG. NO. 8-164 S93

76-264



Expansion Dam - Abutment No. 1

Section "B-B"

NOTES:

NOTE:
For Details & Sections not shown see Dwg. No. B-164-S95
For Bill of Material see Dwg. B-164-S95

Northbound Bridge

DRAWN	1-29-59	J.P.F.
REVISION	2-18-59	J.P.F.
REVISION		
REVISION		

EXPANSION JOINTS

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

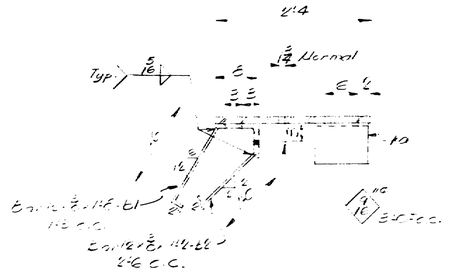
TUKEYS BRIDGE
PORTLAND, MAINE

CUSTOMER M. H. HINMAN INC.
DESIGNER MAINE S. H. C. BRIDGE DIV.

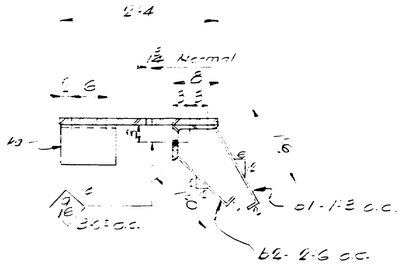
ORDER NO. VERBAL | DWG. NO. B-164-S94

APP'D. 7-51

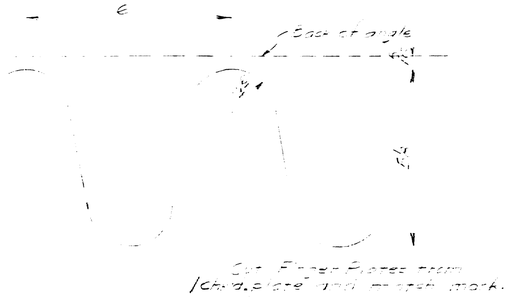
76-265



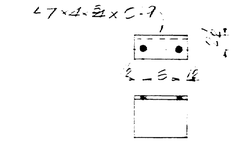
SECTION C-C



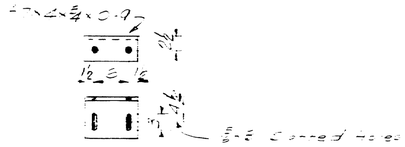
SECTION D-D



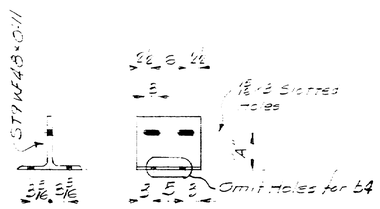
FINGER CUTTING DETAIL

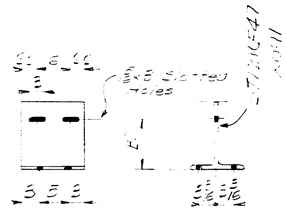


4a-Detail



4b-Detail



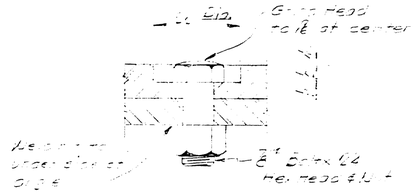


MARK	No.	"A"
b3	2	8
b4	2	7 3/4
b5	2	7 1/4

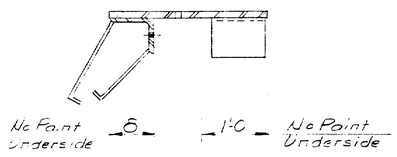
No Paint
Bolt for shipment

MARK	No.	B
b6	2	10 7/16
b7	2	9 7/16

No Paint
Bolt for shipment



BOLTING DETAIL

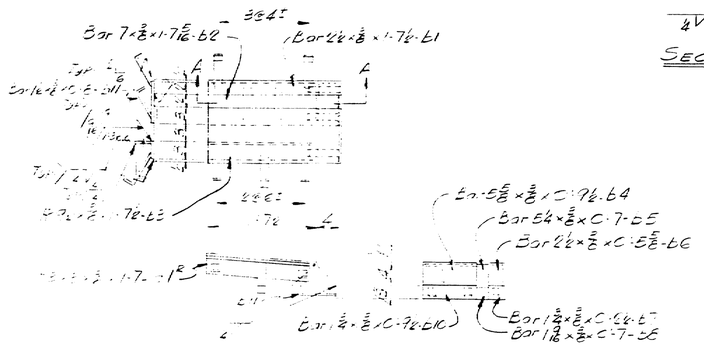


SECTION (TYP.)
Do not paint anchors & clips

INCLUDE
15- PA - PL 8½ x ½ x 0'-11
15- PB - PL 10¼ x ½ x 0'-11
28- PC - PL 11 x ½ x 0'-11
No Fabrication - No Paint
To be field welded

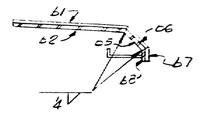
SHIP BILL OF MATERIAL DWG NO 3-164-S95

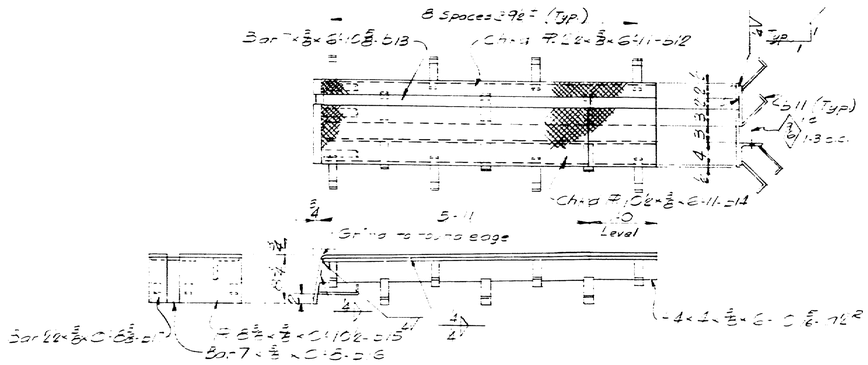
MARK	No.	MARK	SIZE	LENGTH	AT	WT. PER PC.	REMARKS
W1A	1		ASSEMBLY	2	2	—	
W1B	1		"	12	0	—	
W1C	1		"	14	0	—	
W2A	1		"	12	0	—	
W2B	1		"	12	0	—	
W2C	1		"	14	0	—	
	1	PL	[illegible]	12	0		24
		PL	"	2	0		27
		PL	"	4	0		18
		PL	"	2	0		26
		PL	"	2	0		37
	1	PL	"	4	0		68
	2	[illegible]	[illegible]	2	0		
	2	[illegible]	"	2	0		
	2	[illegible]	"	4	0		
	[illegible]	[illegible]	[illegible]	[illegible]	0		
	[illegible]	[illegible]	"	[illegible]	0		
	2	PL	"	2	0		
	[illegible]	[illegible]	[illegible]	[illegible]	0		
	2	PL	"	2	0		
	2	PL	"	2	0		
	2	PL	"	2



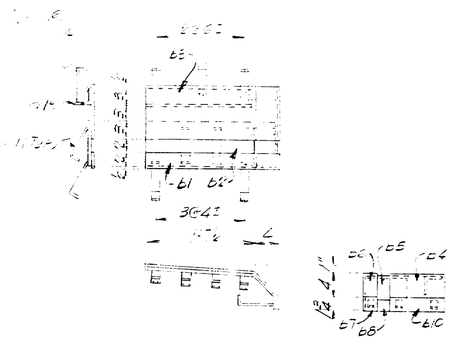
NM1 - ONE REQ'D

MEDIAN





NS1 - ONE REQ'D

SIDEWALK

NM1 - ONE REQ'D

MEDIAN

EXPANSION DAMS - ABUTMENT No. 2

EXPANSION DAMS - ABUTMENT No. 1

SHIP MARK	NO	MARK	SHAPE	LENGTH	WT.	REMARKS
NM11	1		432EWBar	1 11/16	—	
NM2	1		Do	1 1/16	—	
VS1			Do	6 1 3/4	—	
VS2	1		Do	6 1 3/4	—	
	2	21	Bar 2 x 3/8	1 7½		
	2	22	Bar 7 x 3/8	1 7 5/16		
	2	23	Pl ½ x 3/8	1 7½		
	4	24	Bar 5 3/8 - 3/8	C 7½		
	2	25	Bar 5½ x 3/8	C 7		
	4	26	Bar 2½ x 3/8	C 5 3/8		
	2	27	Bar ½ x 3/8	C 7½		
	2	28	Bar ½ x 3/8	C 7		
	2	30	Bar ½ x 3/8	C 7½		
	62	31	Bar ½ x 3/8	C 8		
	2	32	Pl 2½ x 3/8	5 1		
	2	33	Bar 7 x 3/8	5 5 3/8		
	1	34	Pl 2½ x 3/8	12 1		
	2	35	Pl 2½ x 3/8	5 5½		
	2	36	Bar 7 x 3/8	5 5		
	2	37	Bar 2½ x 3/8	5 3 3/8		
	2	38	Pl 6 x 3/8	1 7		
	2	39	Pl 2½ x 3/8	2 5 3/8		

SHOP CONNECTIONS
FIELD CONNECTIONS
HOLES
PAINT

EXPANSION DAMS

Dimond & Morton-Kellogg-Mills Company
South Portland 7, Maine

TYKERS BRIDGE
PORTLAND, MAINE

CUSTOMER M.H.M. Hyman Inc.
DESIGNER Maine S.H.C. Bridge Div.

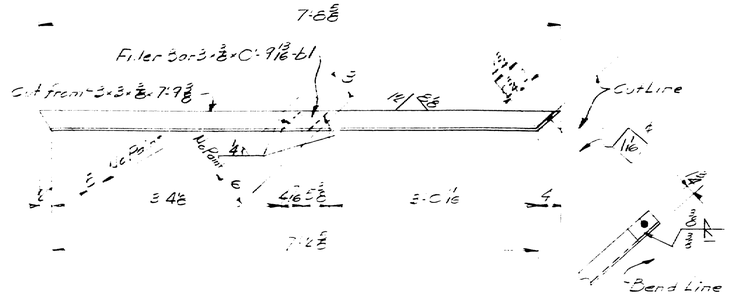
ORDER NO. VERBAL | DWG. NO. B-164-396

APP. 6-17-59

DRAWN	1-30-59	J.P.F.
REVISION	6-18-59	J.P.F.
REVISION		
REVISION		

76-267

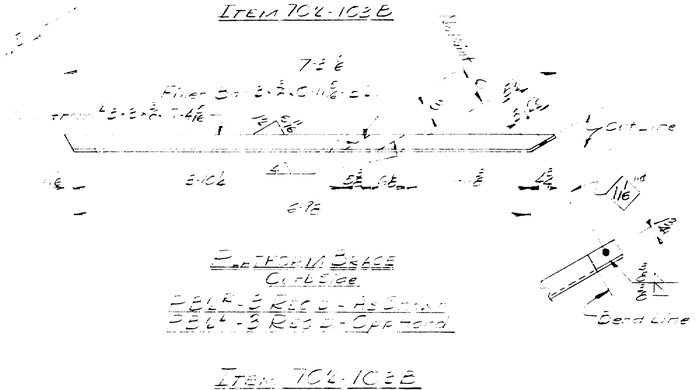
0 1 2 3 4 5 INCHES



Platform Brace
Sidewalk Side

PB1R-3 Req'd-Right Hand
PB1L-3 Req'd-Left Hand

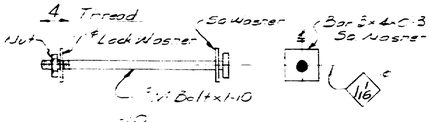
Item 702-103B

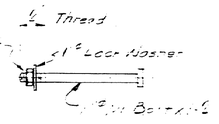


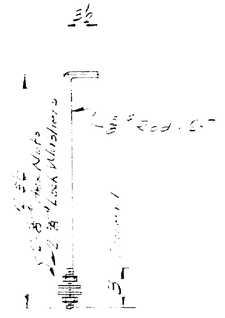
Platform Brace
Curb Side

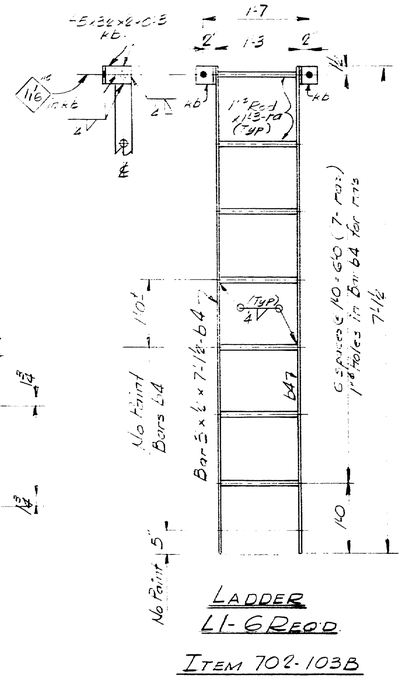
PB2L-3 Req'd-Right Hand
PB2L-3 Req'd-Left Hand

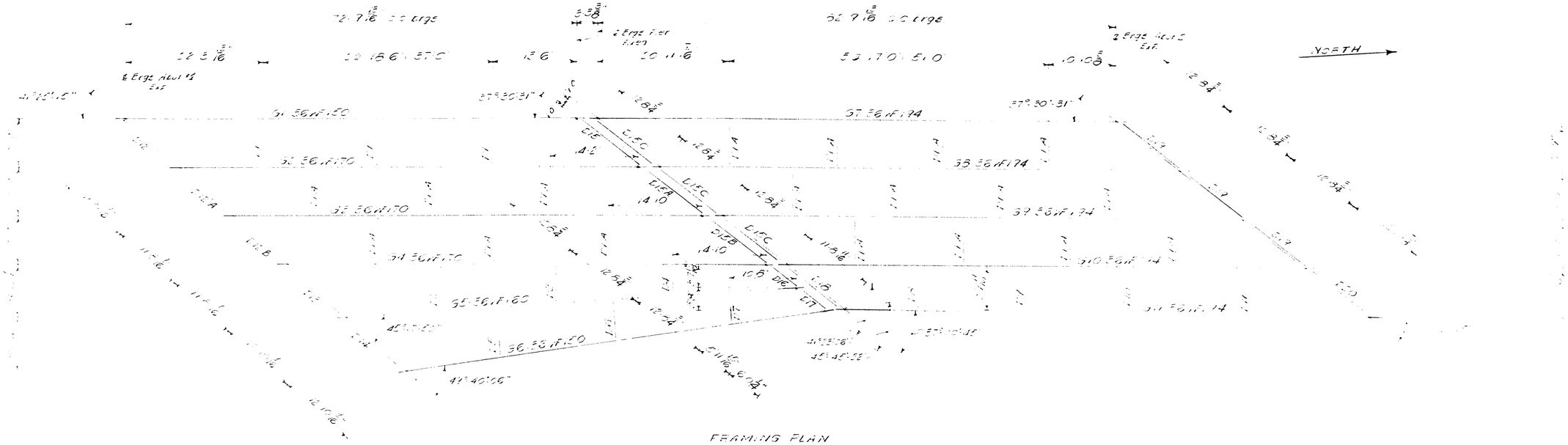
Item 702-103B








1'-7
1'-3
Bar 3"x2"x C'-3 KB
1" Rod (Typ)
Bar 3"x2"x C'-7 KA
Bar 3"x2"x C'-10 KA
Bar 3"x2"x C'-6 KB
Bar 3"x2"x C'-4 KB
Bar 3"x2"x C'-2 KB
Bar 3"x2"x C'-0 KB
Bar 3"x2"x C'-8 KB
Bar 3"x2"x C'-5 KB
Bar 3"x2"x C'-1 KB
Bar 3"x2"x C'-9 KB
Bar 3"x2"x C'-7 KB
Bar 3"x2"x C'-11 KB
Bar 3"x2"x C'-3 KB
Bar 3"x2"x C'-0 KA
Bar 3"x2"x C'-8 KA
Bar 3"x2"x C'-5 KA
Bar 3"x2"x C'-1 KA
Bar 3"x2"x C'-9 KA
Bar 3"x2"x C'-7 KA
Bar 3"x2"x C'-11 KA
Bar 3"x2"x C'-3 KA


NORTH
2 Ergs Near Ends
8 Ergs Near Ends
37°30'31"
41°29'15"
49°40'06"
45°45'52"
L1E6
L1E5
L1E4
L1E3
L1E2
L1E1
L1E7
L1E8
L1E9
L1E10
L1E11
L1E12
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L1E46