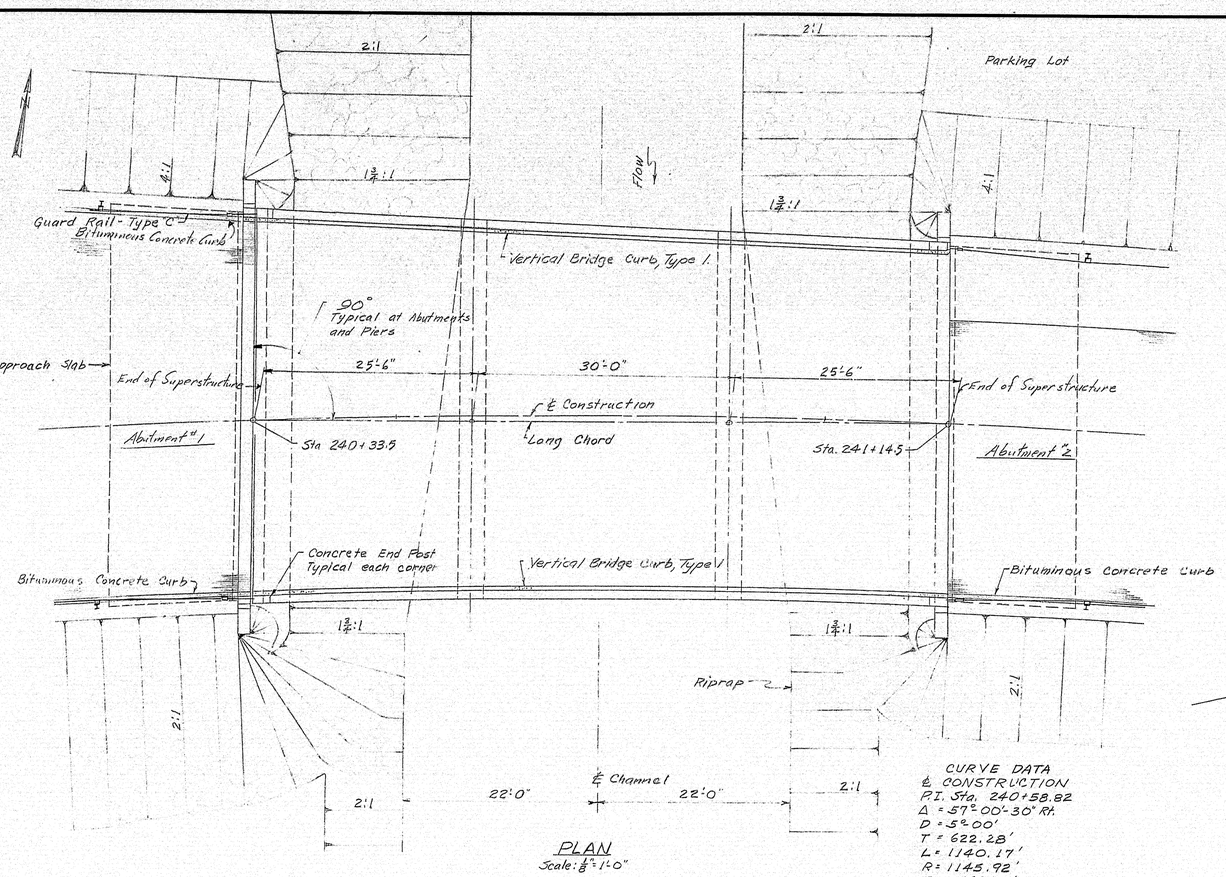
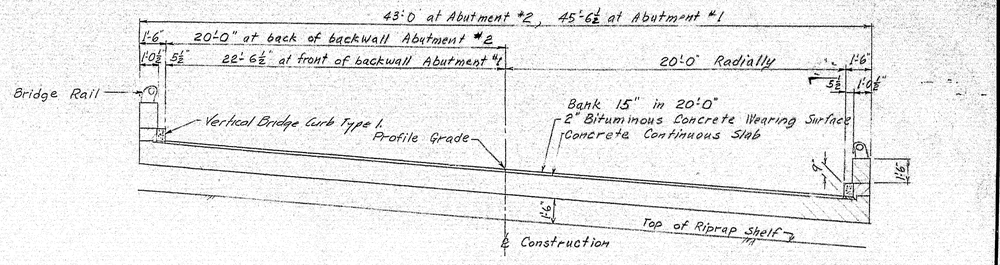
| B. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | F-019-1(4) | 2 | 128 |

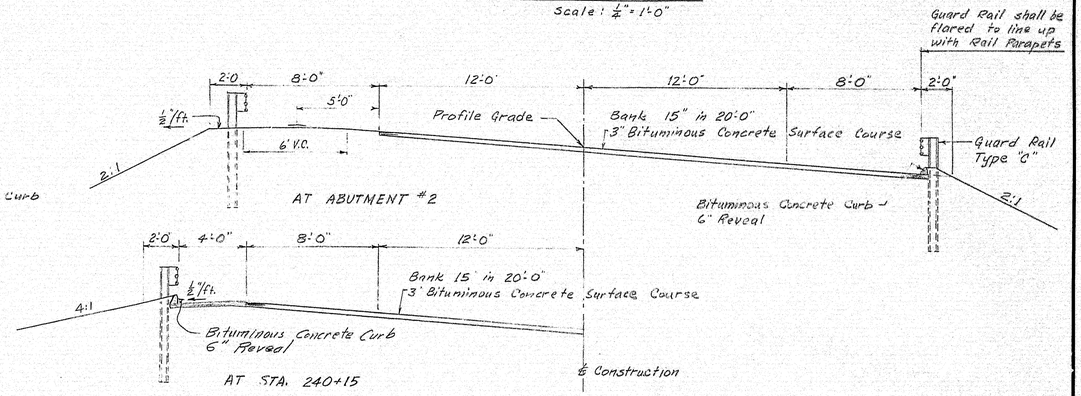



PLAN
Scale: ⅛"=1'-0"

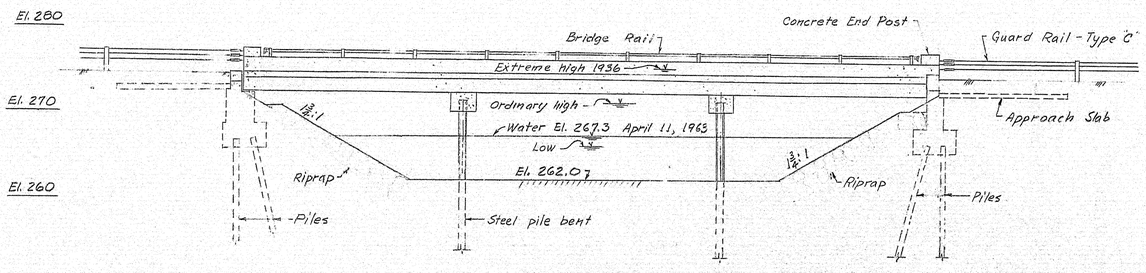
CURVE DATA
℄ CONSTRUCTION
P.I. Sta. 240+58.82
Δ = 57° 00'-30" Rt.
D = 5° 00'
T = 622.28'
L = 1140.17'
R = 1145.92'
Ex. = 158.07'



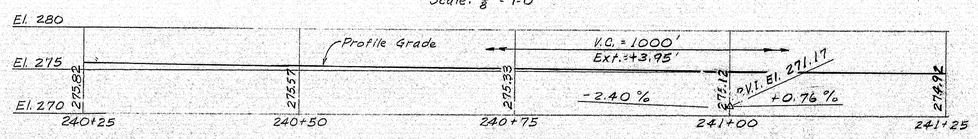

BRIDGE SECTION
Scale: ½"=1'-0"




APPROACH SECTIONS
Scale: ½"=1'-0"




ELEVATION
Scale: ⅛"=1'0"




PROFILE ℄ CONSTRUCTION
Scale: ⅛"=1'-0"

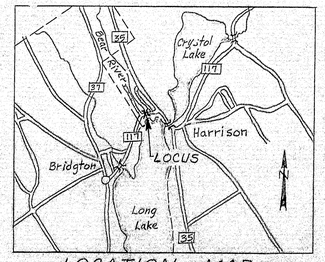
El. 280
El. 270
El. 260

## TRAFFIC

| | |
|---|---|
| ADT 1964 | 1205 |
| ADT 1984 | 1685 |
| DHV | 253 |
| T | 10 % |
| D | 60 % |
| V | 60 m.p.h. |

## NOTES

SPECIFICATIONS
Design: A.A.S.H.O. Standard Specifications for Highway Bridges, 1961 with Interim Specifications 1961, 1962.
Contract: State of Maine, State Highway Commission, Standard Specifications for Highways and Bridges, Revision of Jan. 1956 and Supplemental Specifications, February 1963
LIVE LOADING
H20-S16-44.
DRAINAGE AREA
23 square miles
CONCRETE CLASSIFICATION
All concrete shall be Class "A".
ALLOWABLE STRESSES
Concrete - $f_c$ = 1200 p.s.i., n=10.
Reinforcing Steel - $f_s$ = 20,000 p.s.i.




LOCATION MAP
Scale: 1" = 1 mile

| | |
|---|---|
| DESIGN- CDH | BRIDGE NO. |
| TRACE- | SURVEY- |
| CHECK- Blake | PLOT- |

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

# BEAR RIVER BRIDGE

IN THE TOWN OF

## HARRISON
## CUMBERLAND COUNTY

GENERAL PLAN AND ELEVATION

SHEET 1 OF 10 AUGUSTA, MAINE SEPT. 1963

C. B. CO., NO. 44-302 8816

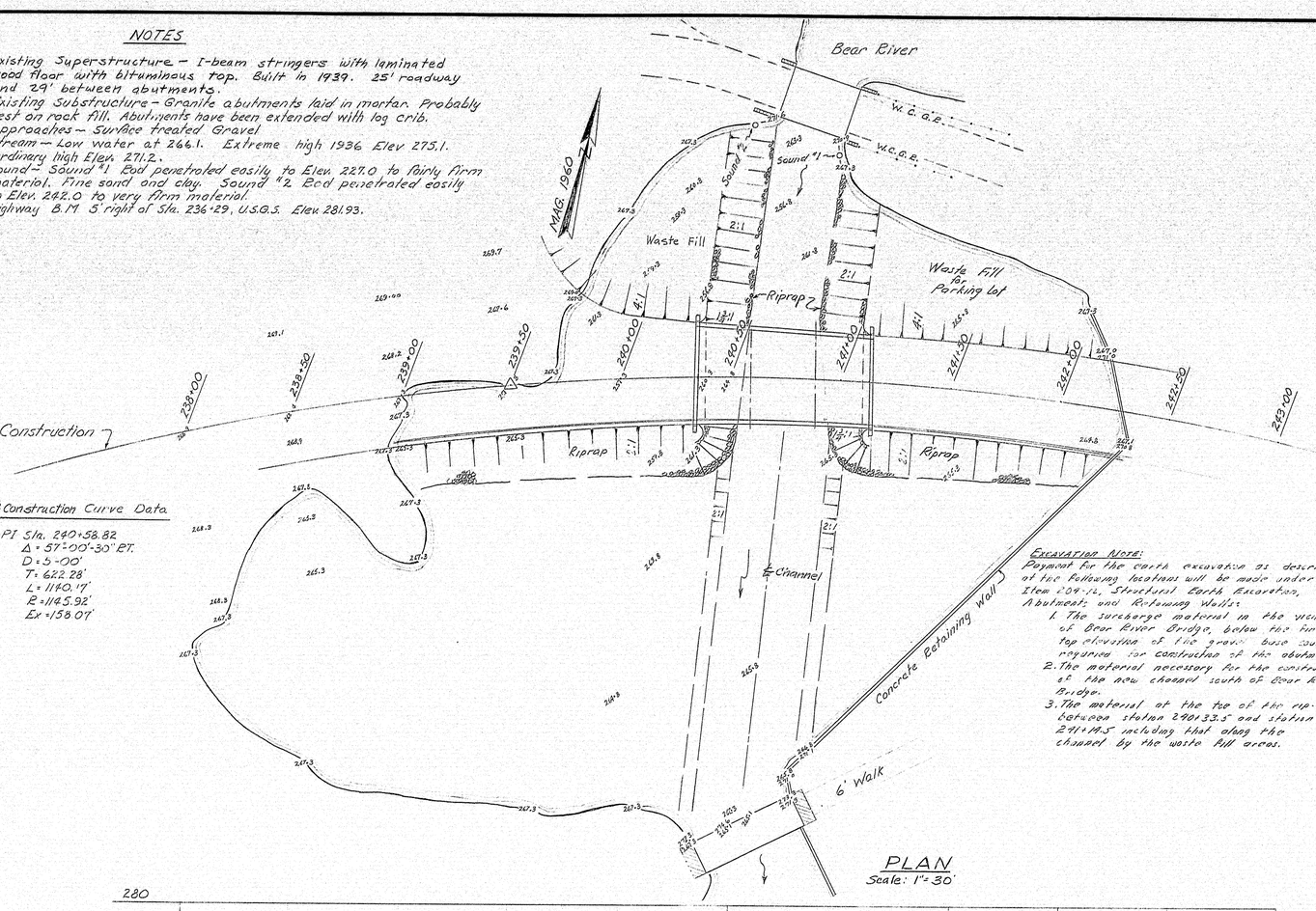
M-2410

BRIDGTON - HARRISON (19)

| B. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | F-019-1(4) | 22 | 128 |

## NOTES

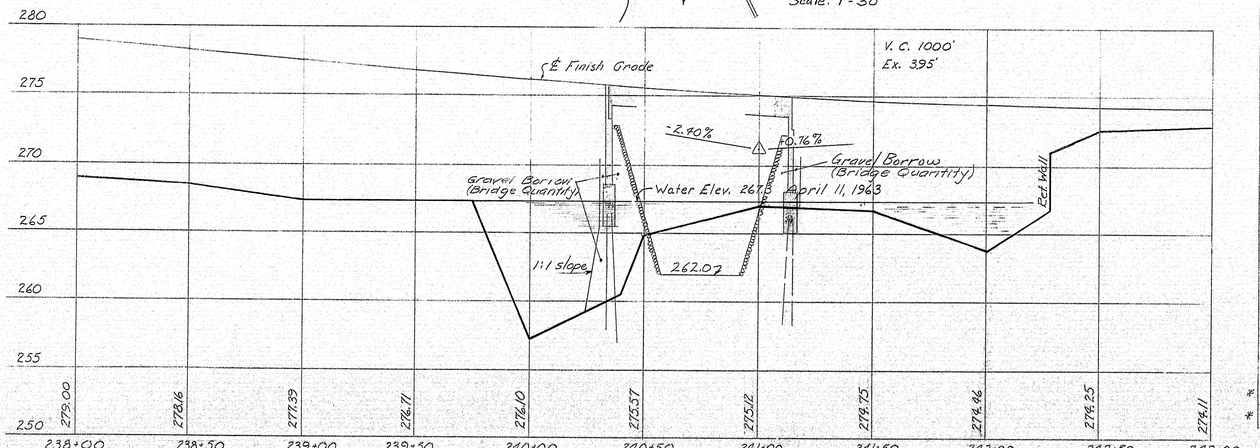
Existing Superstructure – I-beam stringers with laminated wood floor with bituminous top. Built in 1939. 25' roadway and 29' between abutments.
Existing Substructure – Granite abutments laid in mortar. Probably rest on rock fill. Abutments have been extended with log crib.
Approaches – Surface treated Gravel
Stream – Low water at 266.1. Extreme high 1936 Elev 275.1.
Ordinary high Elev. 271.2.
Found – Sound #1 Bed penetroted easily to Elev. 227.0 to fairly firm material. Fine sand and clay. Sound #2 Bed penetroted easily to Elev. 242.0 to very firm material.
Highway B.M. 5' right of Sta. 236+29, U.S.G.S. Elev 281.93.




PLAN
Scale: 1"=30'

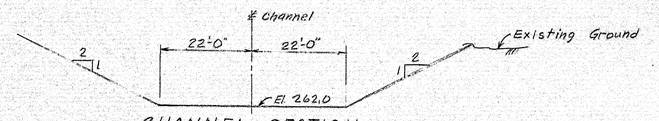
### ℄ Construction Curve Data

PI Sta. 240+58.82
Δ = 57°00'-30" RT.
D = 5°00'
T = 622.28'
L = 1140.17'
R = 1145.92'
Ex = 158.01'

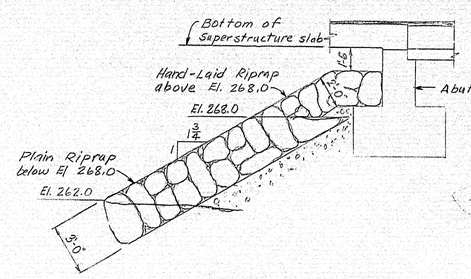



℄ CONSTRUCTION PROFILE
Scales: 1"=5' Vert.; 1"=30' Hor.

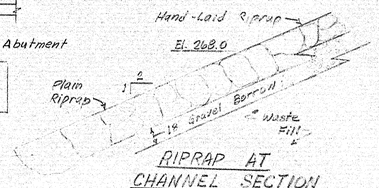
**Excavation Note:**
Payment for the earth excavation as described at the following locations will be made under Item 204-12, Structural Earth Excavation, Abutments and Retaining Walls:
1. The surcharge material in the vicinity of Bear River Bridge, below the final top elevation of the gravel base course required for construction of the abutments.
2. The material necessary for the construction of the new channel south of Bear River Bridge.
3. The material at the toe of the rip-rap between station 240+33.5 and station 241+14.5 including that along the channel by the waste fill areas.




CHANNEL SECTION
SOUTH OF BRIDGE




RIPRAP SECTION




RIPRAP AT
CHANNEL SECTION
NORTH OF BRIDGE

### ESTIMATED QUANTITIES

| | | |
|---|---|---|
| 204-12 | Structural Earth Excavation - Abuts. and Ret. Walls | 1685 C.Y. |
| 205-10 | Gravel Borrow | 800 cy |
| 302-7 | Gravel Base Course – In Place Measurement | 50 cy |
| 308-6 | Overhaul (Pit Measure) | 5,000 Yd. Mi. |
| 404-29 | Bituminous Concrete Surface Course, Type "B" | 4 Tons |
| 701-33 | Portland Cement Concrete, Abuts. & Ret. Walls | 140 cy |
| 701-35 | Portland Cement Concrete, Piers | 19 cy |
| 701-39 | Portland Cement Concrete, Superstructure Slabs | 194 cy |
| 701-55 | Curing Box for Concrete Cylinders | 1 |
| 702-103 | Structural Steel, Fabricated and Delivered | lump sum |
| 702-104 | Structural Steel, Erection | lump sum |
| 702-105 | Structural Steel, Field Painting | lump sum |
| 705-13 | Reinforcing Steel, Delivered | 52,000 lbs |
| 705-14 | Reinforcing Steel, Placing | 52,000 lbs |
| 708-16 | Steel H-Beam Piles, 42 lbs./ft. | 2000 L.F. |
| 801-7 | Remov. of Exist. Superstructure (Property of Contractor) (Bear River Bridge) | lump sum |
| 803-9 | Cofferdams (Abutment No. 1, Bear River Bridge) | lump sum |
| 803-10 | Cofferdams (Abutment No. 2, Bear River Bridge) | lump sum |
| 805-8 | Bridge Rail | 152 L.F. |
| 807-9 | Membrane Waterproofing | 410 s.y. |
| 907-12 | Epoxy Resin Treatment for Pier Piles | 216 s.y. |
| 901-24 | Vertical Bridge Curb Type I. | 164 L.F. |
| * 907-9 | Plain Rip-rap | 470 cy |
| * 907-10 | Hand Laid Rip-rap | 135 cy |

Estimated Weight of Structural Steel = 41,600 lbs. including Drains.
* Rip-rap in these quantities - Bear River Bridge - is computed between Station 240+33.5 and Station 241+14.5

### INDEX of SHEETS


Sheet No. Title
1. General Plan and Elevation
2. Survey
3-4-5 Foundation Survey
6 Abutment No. 1
7. Abutment No. 2
8. Piers and Miscellaneous Details
9 Superstructure
10. Reinforcing Steel Schedule
Standard Details:
BD 102-64 Bridge Rail
BD 104-64 Diaphragms, Armored Joints, Shear Connectors and Drains.


DESIGN – CDH
TRACE – G.O.T.
CHECK – Waite
BRIDGE NO.
SURVEY – BLAKE
PLOT – G.O.T.

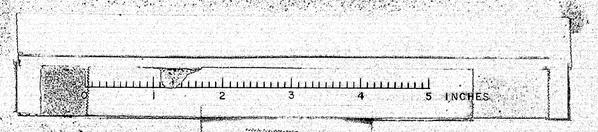
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

# BEAR RIVER BRIDGE
IN THE TOWN OF
# HARRISON
# CUMBERLAND COUNTY

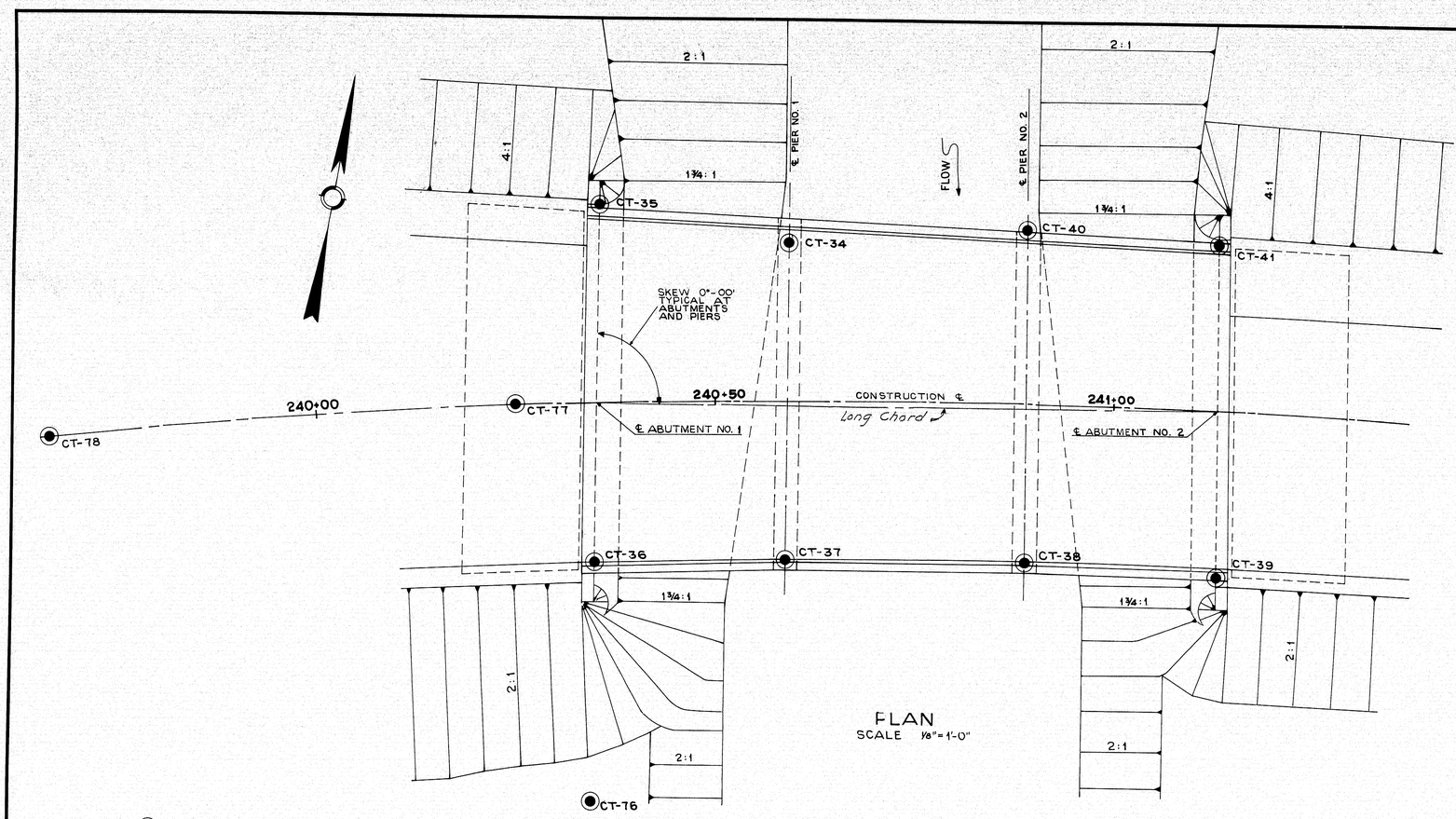
SURVEY
SHEET 2 OF 10 AUGUSTA, MAINE JUNE 1963

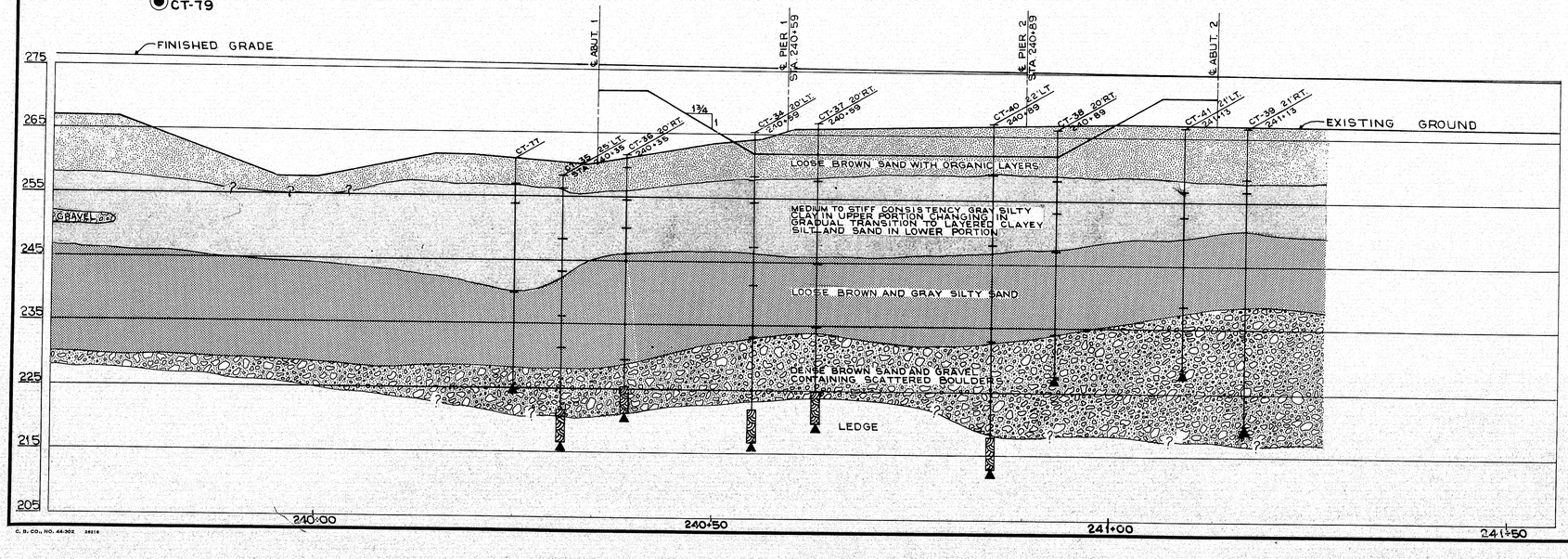
C. B. CO., NO. 44-303 26816

M-2411



| B. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | F-019-1(4) | 23 | 128 |




## BORING NOTES

ALL SAMPLES AND VANES ARE MADE AHEAD OF CASING

N — NUMBER OF BLOWS REQUIRED TO DRIVE EXTRA HEAVY CASING ONE FOOT WITH 400 FT. LBS. OF ENERGY PER BLOW.

■ LOCATION OF SAMPLE OR SAMPLE ATTEMPT

NUMBER AND TYPE OF DRY SAMPLE

1D — S+H SAMPLER #1290's

1C — 2" O.D. 16 GA. SEAMLESS TUBING

1U — 3½" O.D. 16 GA. SEAMLESS TUBING

MD — UNSUCCESSFUL SAMPLE ATTEMPT AND TYPE OF SAMPLER.

T — NUMBER OF BLOWS REQUIRED TO DRIVE SPOON OR TUBING ONE FOOT WITH 350 FT. LBS. OF ENERGY PER BLOW.

H — SAMPLING SPOON OR SEAMLESS TUBING DRIVEN BY STATIC WEIGHT OF DRILL RODS AND HAMMER

FIELD VANE TEST

BOTTOM OF BORING (MAY NOT BE BOTTOM OF SOIL STRATA.)

REFUSAL OF DRILL RODS OR CASING (MAY NOT BE LEDGE)

70% LOCATIONS CORED BY DIAMOND BIT AND PER CENT RECOVERY OF ROCK.

## SHEAR NOTES

● FIELD VANE SHEAR STRENGTHS

× LABORATORY VANE SHEAR STRENGTHS

→ SHEAR STRENGTHS IN EXCESS OF CAPACITY OF EQUIPMENT

## WATER CONTENT NOTES

o NATURAL WATER CONTENTS, GIVEN AS PER CENT OF DRY WEIGHT

⊗---X PLASTIC AND LIQUID LIMITS

C. B. CO., NO. 44-302 38016

DESIGN— TRACE— CHECK— Soils D.U.

BRIDGE NO. SURVEY— PLOT—

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

# BEAR RIVER BRIDGE

IN THE TOWN OF

# HARRISON

CUMBERLAND COUNTY

FOUNDATION SURVEY

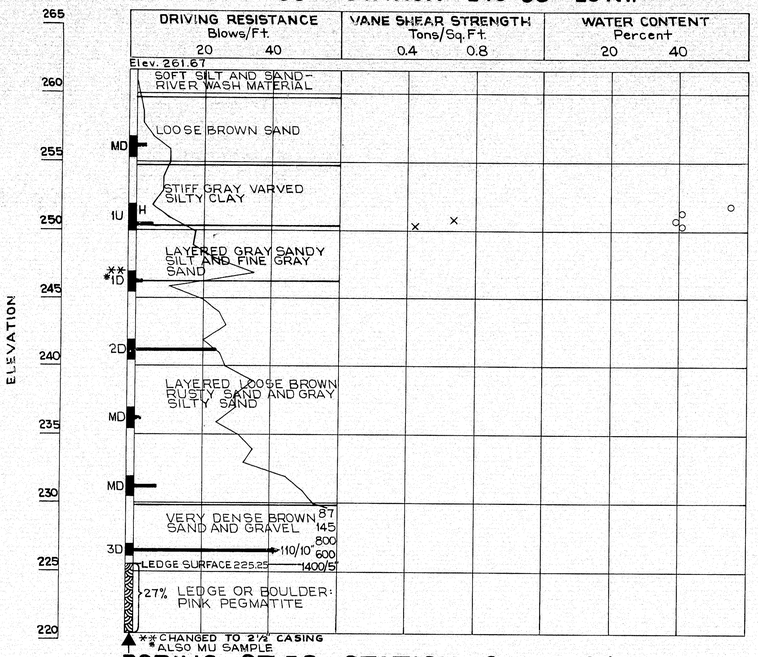
SHEET 3 OF 10 AUGUSTA, MAINE Nov. 1963

F-2412

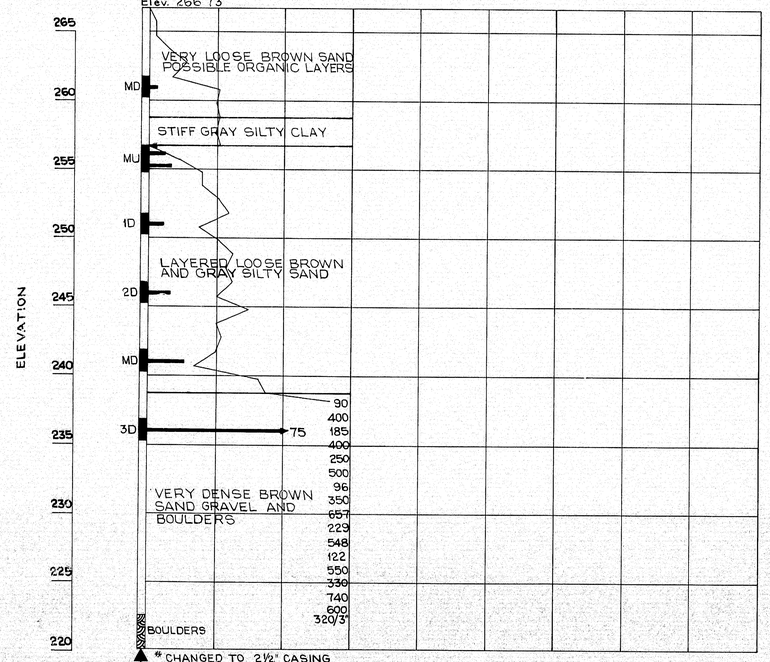
RANDOM: HARRISON QUAD

| B. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | F-019-1(4) | 24 | 128 |

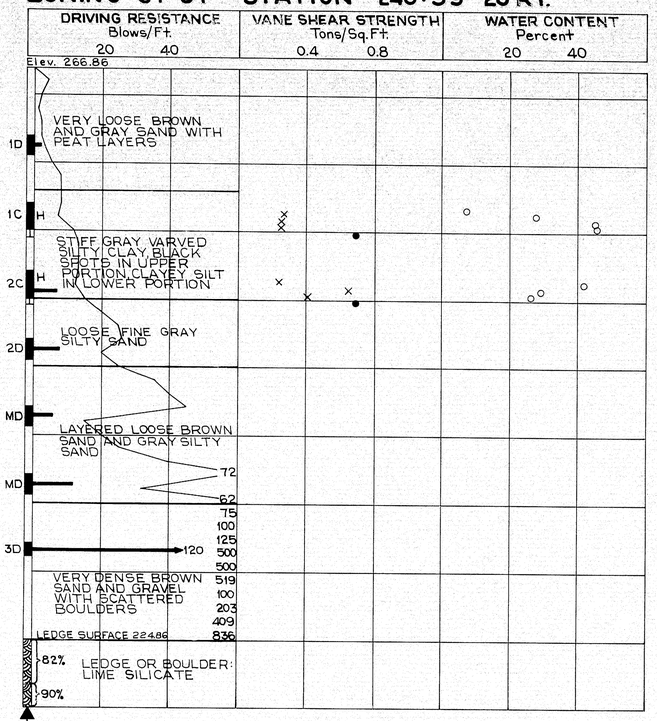
## BORING CT-36 STATION 240+35 20'RT.



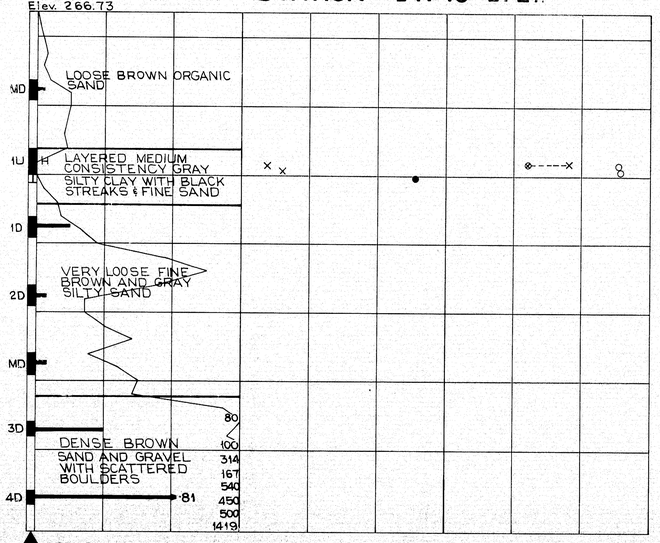

## BORING CT-39 STATION 241+13 21'RT.




## BORING CT-37 STATION 240+59 20'RT.

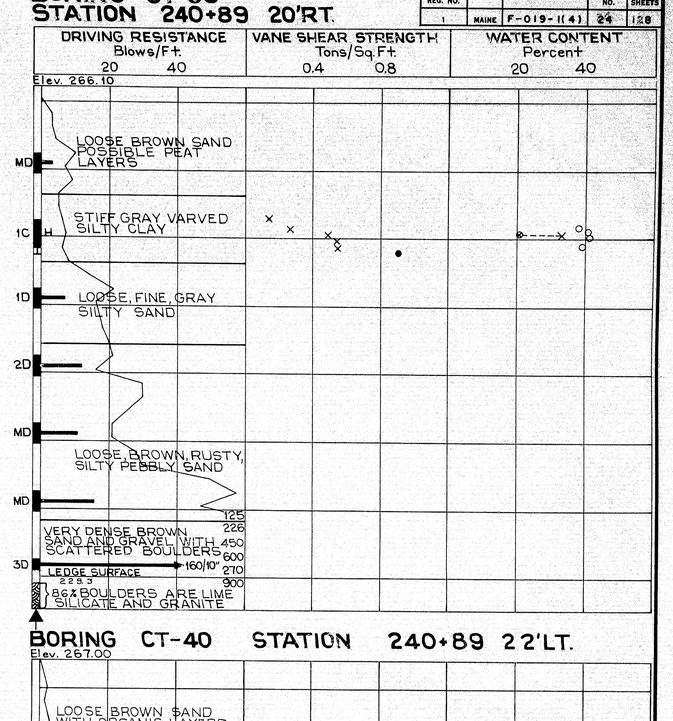



## BORING CT-41 STATION 241+13 21'LT.

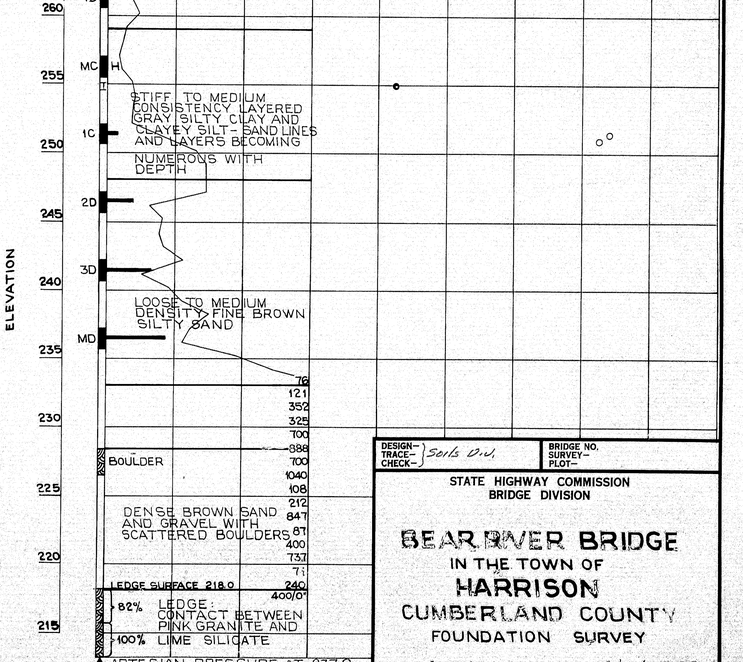



ARTESIAN PRESSURE NOTED WHEN CASING REACHED ELEV. 236.7

## BORING CT-38 STATION 240+89 20'RT.




## BORING CT-40 STATION 240+89 22'LT.




ARTESIAN PRESSURE AT 237.0

DESIGN– TRACE– CHECK– Soils Dv.

BRIDGE NO. SURVEY– PLOT–

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

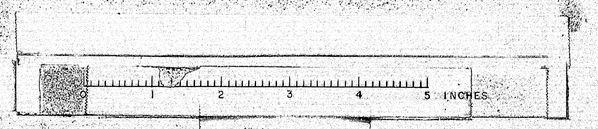
# BEAR RIVER BRIDGE
IN THE TOWN OF
# HARRISON
CUMBERLAND COUNTY
FOUNDATION SURVEY

SHEET 4 OF 10 AUGUSTA, MAINE NOV. 1963

M-2413

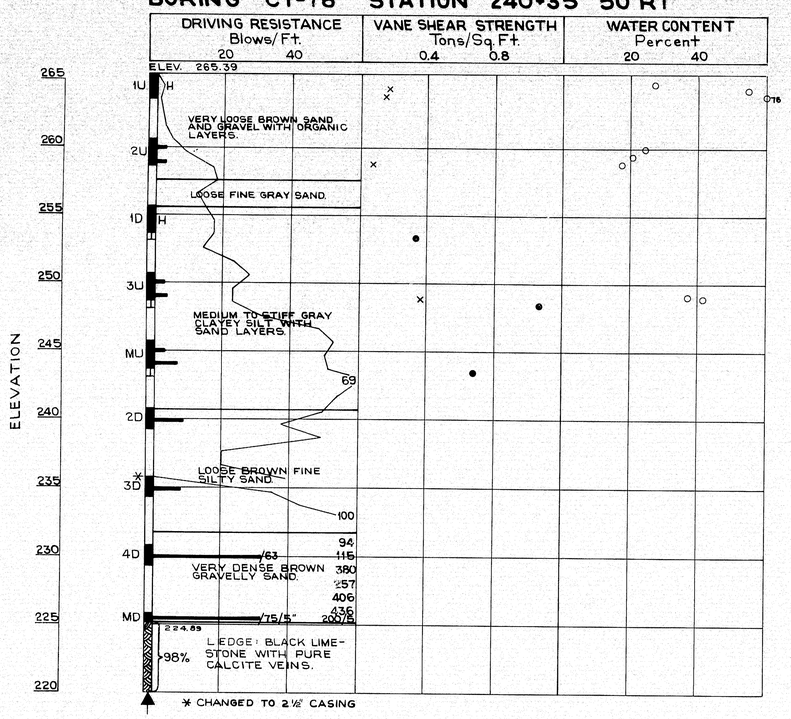
BRIDGE HARRISON (19)

C. B. CO., NO. 44-302 - 28316

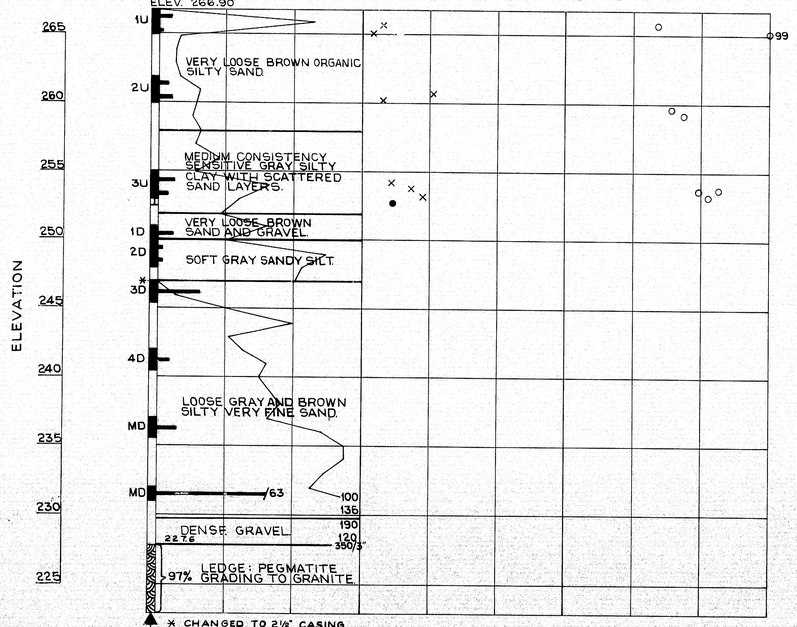


| B. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | F-019-1(14) | 25 | 128 |

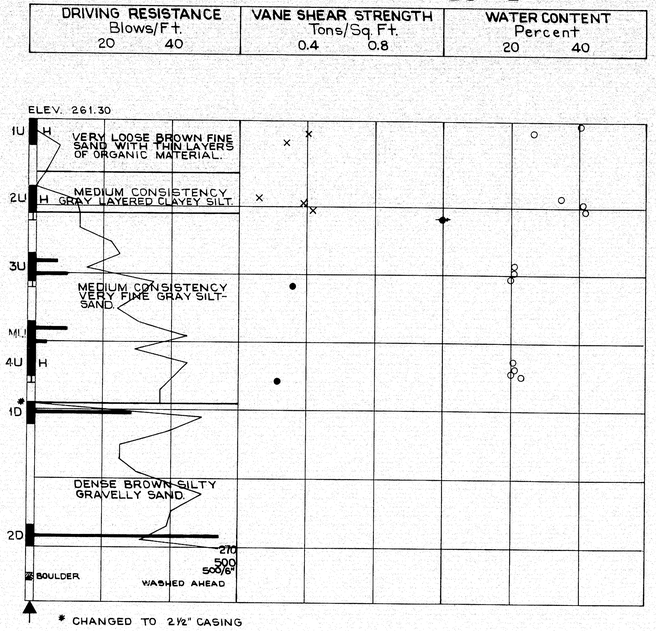
## BORING CT-76 STATION 240+35 50'RT



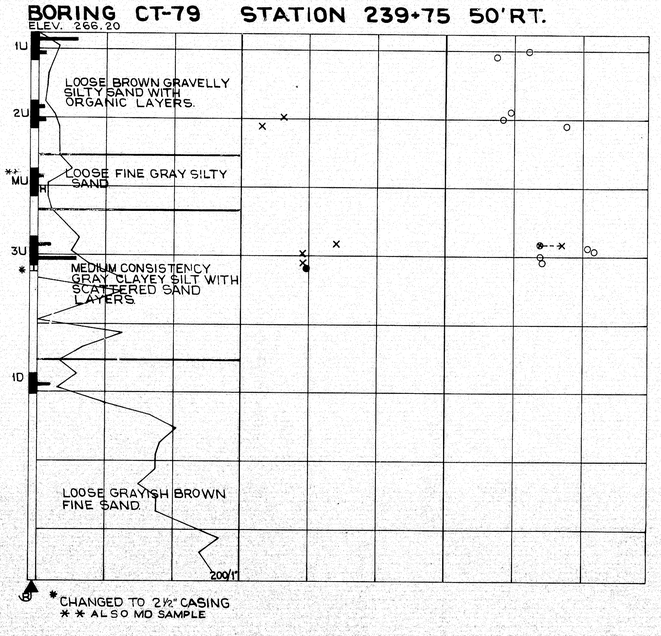

## BORING CT-78 STATION 239+66 ℄



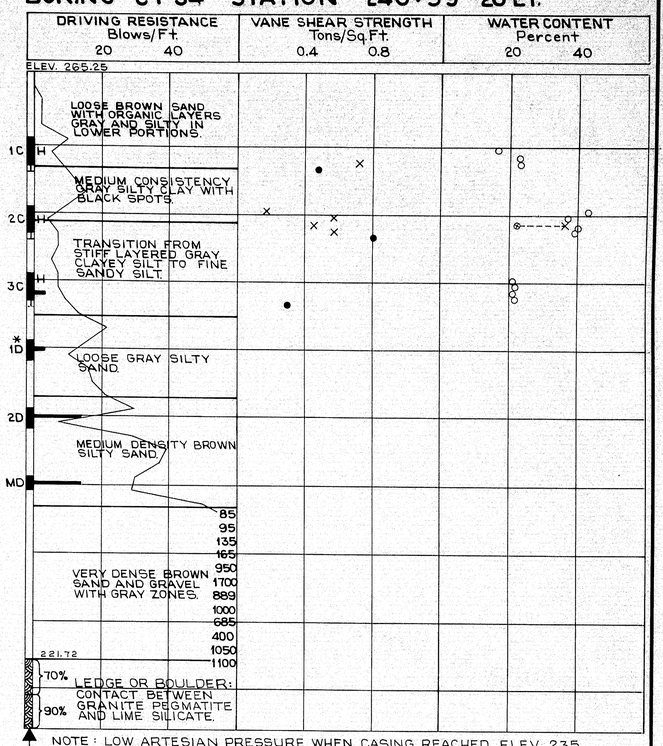

## BORING CT-77 STATION 240+25 ℄



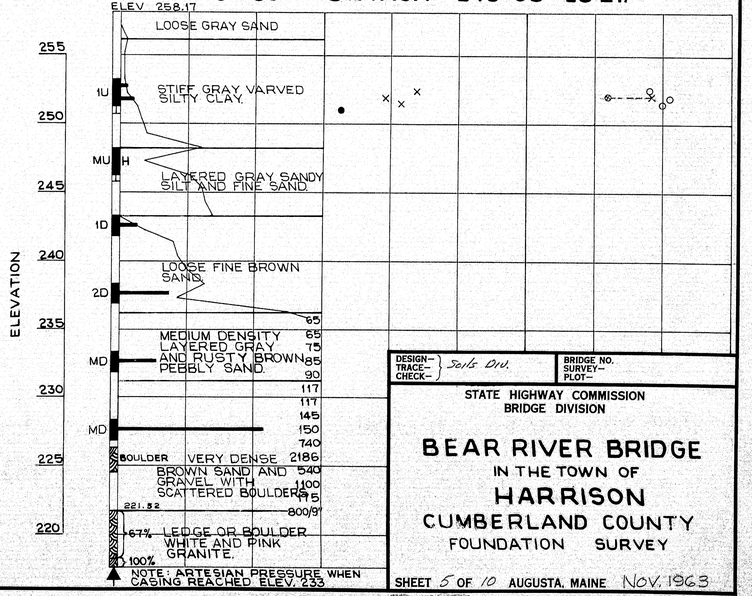

## BORING CT-79 STATION 239+75 50'RT.




## BORING CT-34 STATION 240+59 20'LT.




## BORING CT-35 STATION 240+35 25'LT.




DESIGN— TRACE— CHECK— Soils Div.

BRIDGE NO. SURVEY— PLOT—

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

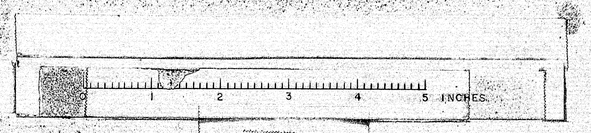
# BEAR RIVER BRIDGE
IN THE TOWN OF
# HARRISON
CUMBERLAND COUNTY
FOUNDATION SURVEY

SHEET 5 OF 10 AUGUSTA, MAINE NOV. 1963

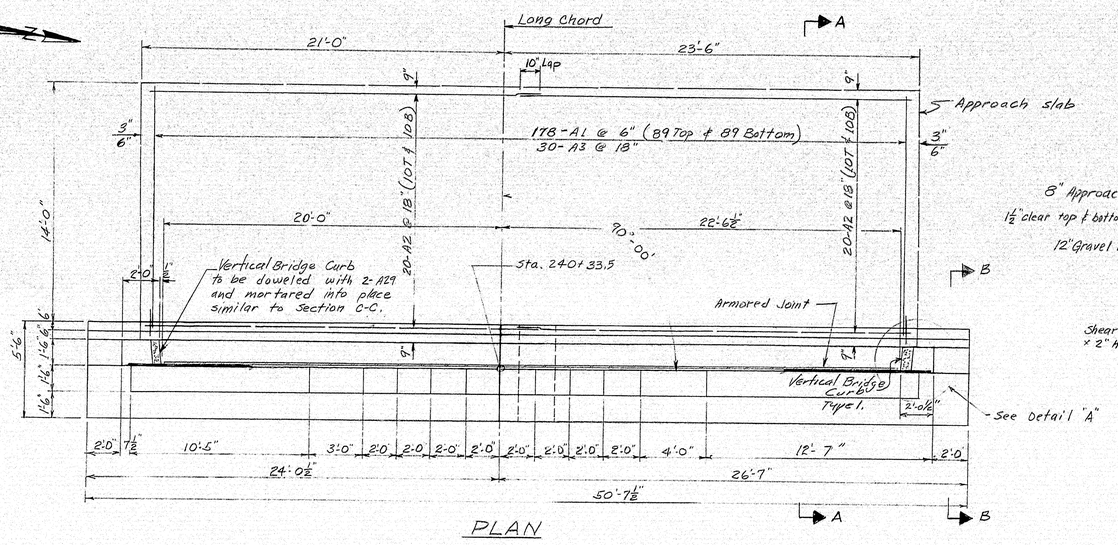
C. B. CO., NO. 44-302 28816

F-019-1

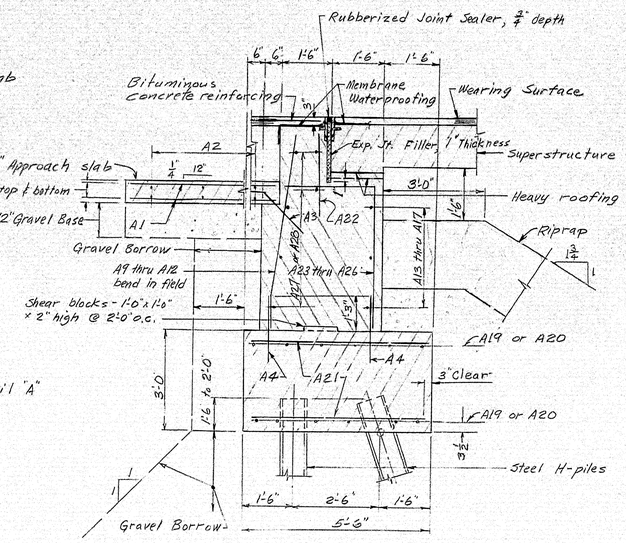
BNDSTD 1 - HA JUN 19..



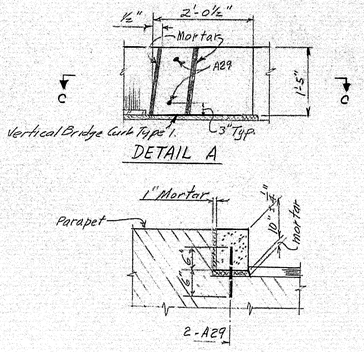
| B. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 1 019 1(4) | 26 | 28 |




PLAN




SECTION A-A

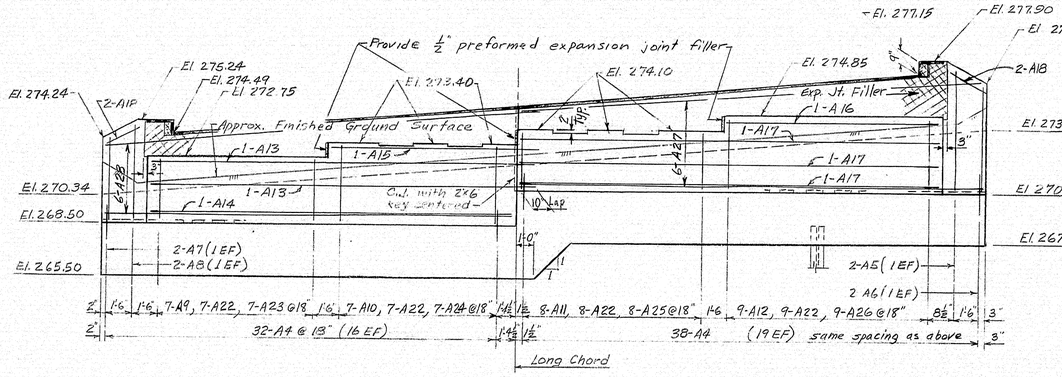



DETAIL A

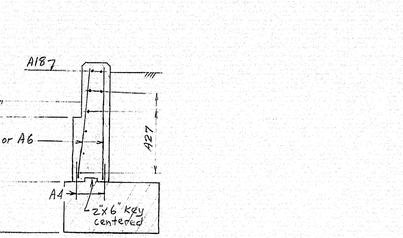



Grout A29 bars into 1¼" ϕ holes in stone prior to setting stone on backwall. Drill 1¼" ϕ holes in backwall to suit A29 bars. Payment for drilling for and grouting of A29 bars to be included in the price for Item 705-14, Reinforcing Steel Placing.

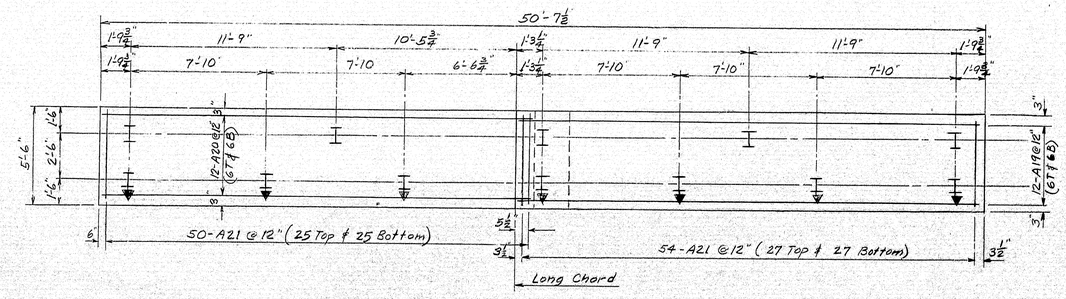
SECTION C-C



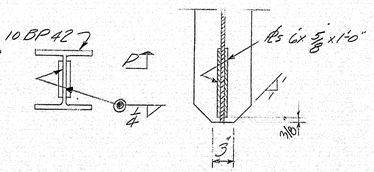

FRONT ELEVATION




SECTION B-B




FOOTING AND PILE PLAN




PLAN SECT P-P

PILE POINT

## GENERAL ABUTMENT NOTES

1. Cover the backside of the vertical construction joints (C.J.), and joints between sides of supports and Abutment #2 with two (2) layers of heavy roofing 10" wide. Coat the surface of the concrete and the back side of each layer as applied with a suitable grade of roofing cement. The area to be covered shall be recessed ¼" - Break bond at C.J. by painting concrete with a suitable grade of asphalt paint.
2. Concrete in approach slabs will be paid for under Item 701-33, Portland Cement Concrete, Abutments & Retaining Walls.
3. All piles shall be 10BP42, steel H-piles
4. Maximum Pile Load = 37 tons
5. Piles marked thus ⟼ shall be battered 3"/ft. in direction of arrow.
6. Piles shall be driven to ledge or practical refusal.
7. Piles read & estimated length. Abutment 1. 6 @ 50 feet, 6 @ 55 feet. Abutment 2. 5 @ 40 feet, 6 @ 45 feet.
8. Place Gravel Borrow to the elevation of the bottom of footings before driving piles.
9. Chamfer all exposed edges of concrete ½".
10. Two (2) inches clear to reinforcing unless noted.
11. 1" Exp. Jt. Filler shall be Preformed Expansion Joint Filler conforming to A.A.S.H.O. Specification M-153-54, and shall be non-bituminous.
12. Two (2) Armored Joint Units Type 'B' Required, see sheet BD 104-64.
13. In areas where piles are to be driven the gravel borrow shall contain no rocks with maximum dimensions over 6 inches, and concentrations of rocks shall be avoided.

| | |
|---|---|
| DESIGN- CDH<br>TRACE-<br>CHECK- Blake | BRIDGE NO.<br>SURVEY-<br>PLOT- |

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

# BEAR RIVER BRIDGE

IN THE TOWN OF

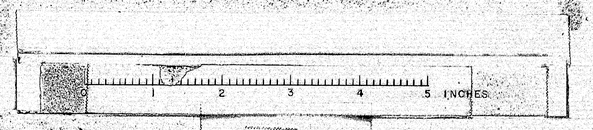
# HARRISON
# CUMBERLAND COUNTY

ABUTMENT NO. 1

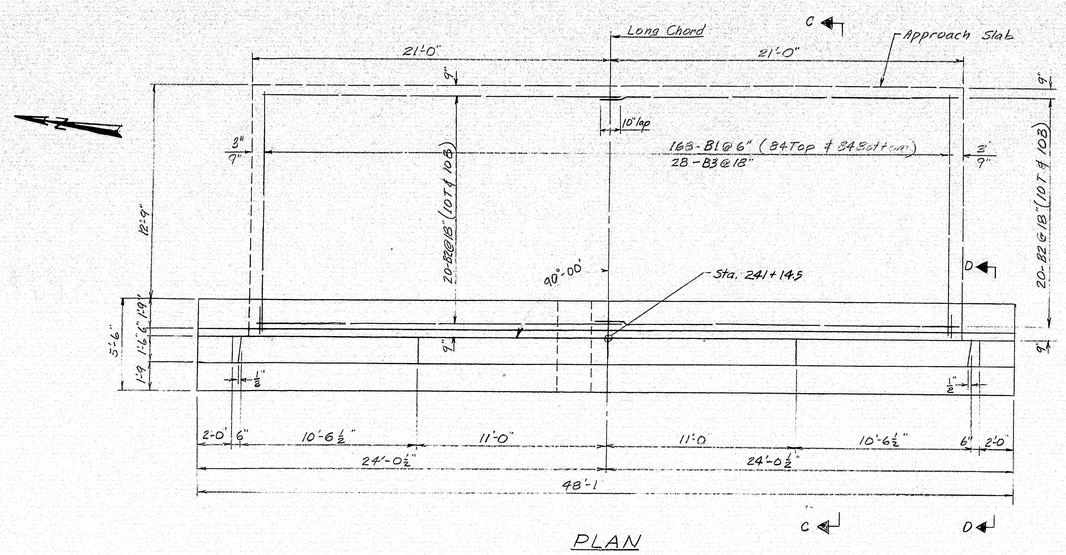
SHEET 6 OF 10 AUGUSTA, MAINE SEPT. 1963

M-2415 BNDG(0.1 - HARRISON

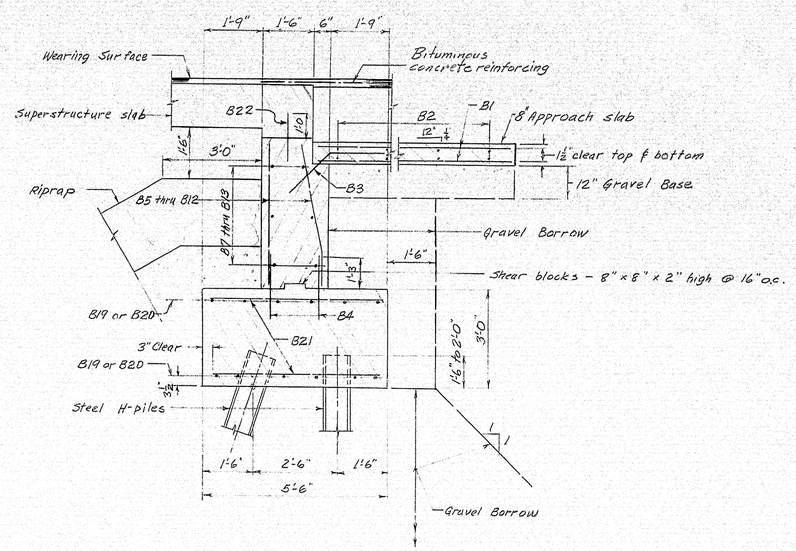
C. B. CO., NO. 44-302 26118



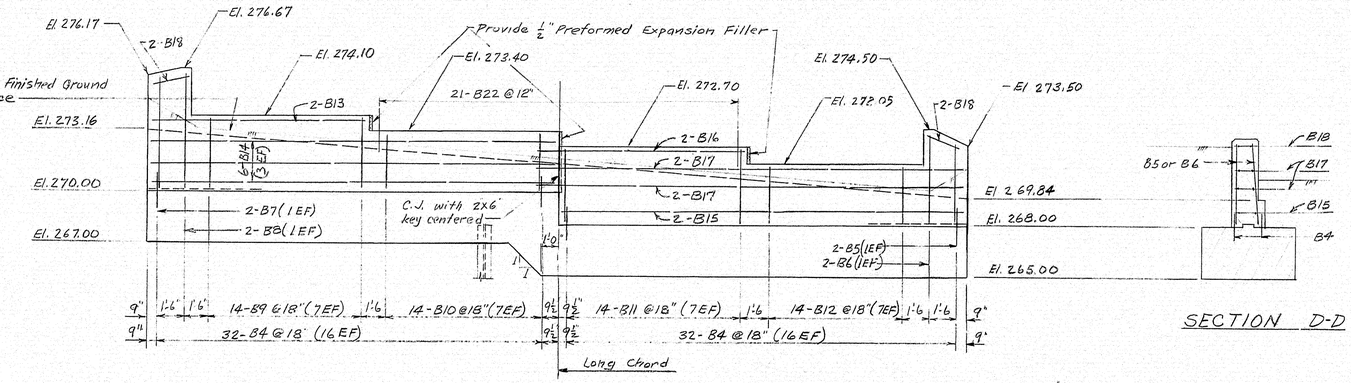
| B. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | F-019-1(4) | 27 | 128 |




PLAN



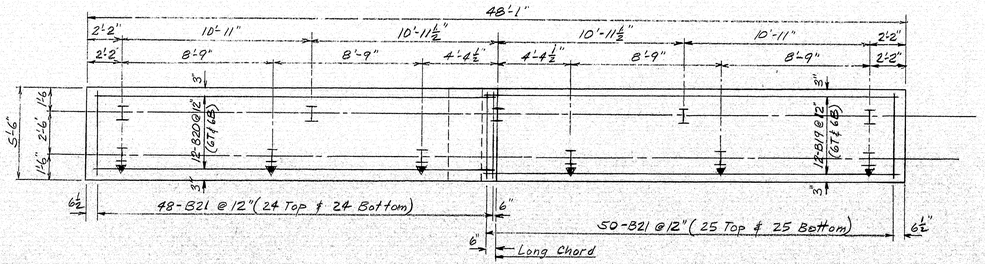

SECTION C-C




FRONT ELEVATION




SECTION D-D




FOOTING AND PILE PLAN

NOTE:
See General Abutment Notes on Abutment No.1 sheet 6.

DESIGN- CDH
TRACE-
CHECK- Blake
BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

# BEAR RIVER BRIDGE

IN THE TOWN OF

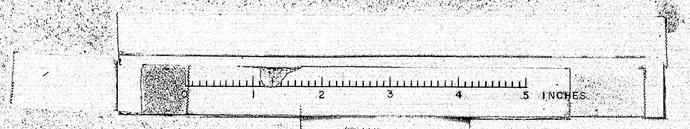
## HARRISON
## CUMBERLAND COUNTY

ABUTMENT NO. 2

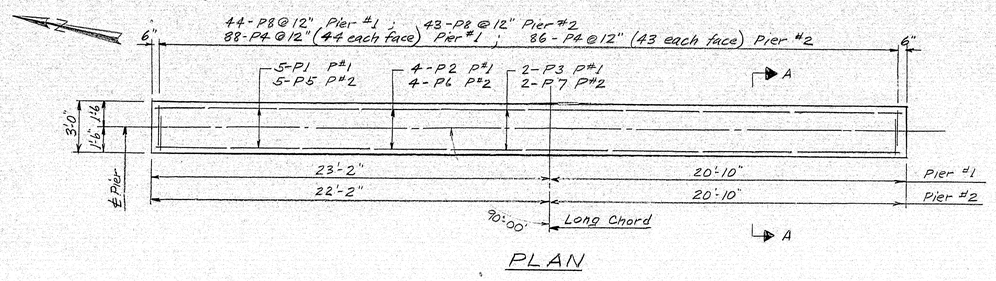
SHEET 7 OF 10 AUGUSTA, MAINE SEPT. 1963

C. B. CO., NO. 44-202

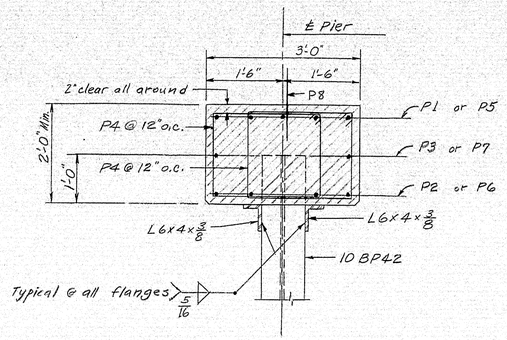
M-8816 BRIDGTON - HARRISON (1)



| B. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | 019-1(4) | 28 | 28 |



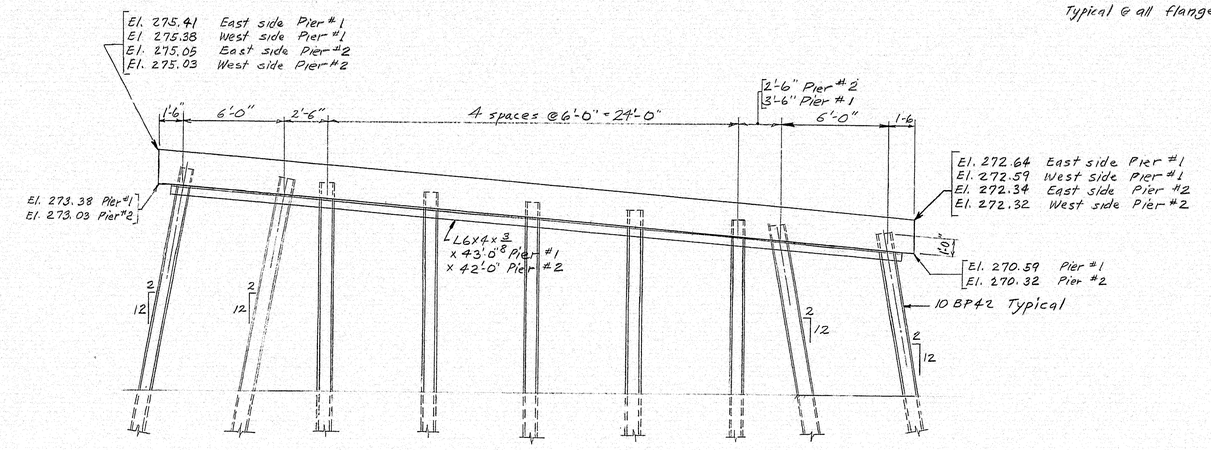

PLAN



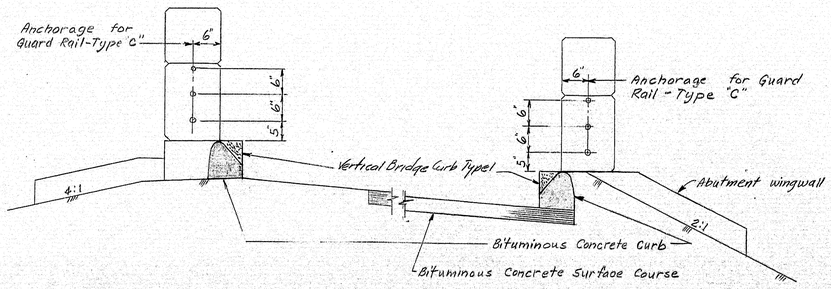

SECTION A-A

## PIER NOTES

1. All piles shall be 10 BP42 steel H-piles.
2. Maximum pile load = 37 tons
3. Piles shall be driven to ledge or practical refusal to develop end bearing.
4. Estimated length of piles : Pier #1 9 Req'd @ 50 feet
   Pier #2 9 Req'd @ 50 ~~feet~~
5. The angles will be paid for under Items 702-103 # and 702-104, Structural Steel.
6. Before driving piles they shall be treated for their top 22' of length with Epoxy Resin as specified in the supplemental specifications.
7. All dimensions are horizontal.
8. Surfaces within 2 inches of any weld location shall be free from any paint, epoxy resin, or any other material that would prevent proper welding. The 6"x4"x⅜ L's shall not be shop painted. After the angles are welded to the piles and the concrete pier caps are placed, the angles shall be given one coat of shop coat paint. Angles and exposed portions of the steel piles to within 6" of the water elevation shall be given 3 coats of field paint.
   Payment for all painting shall be made under Item 702-105 "Structural Steel, Field Painting."

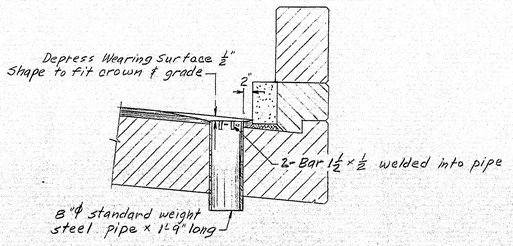



WEST ELEVATION




ELEVATION OF WEST END OF BRIDGE

East end of bridge similar.




DRAIN DETAIL

See superstructure sheet for drain location : (8 Req'd.)
Drains will be paid for as Structural Steel.
Provide six (6) horiz. slots (1" x ½") around pipe to drain bottom of Wearing Surface.

| | |
|---|---|
| DESIGN- CDN | BRIDGE NO. |
| TRACE- | SURVEY- |
| CHECK- Walker | PLOT- |

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

# BEAR RIVER BRIDGE

IN THE TOWN OF

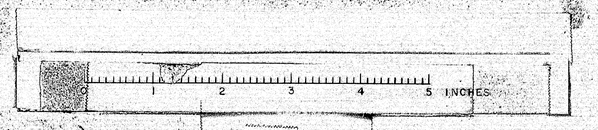
# HARRISON
# CUMBERLAND COUNTY

PIERS AND MISCELLANEOUS DETAILS

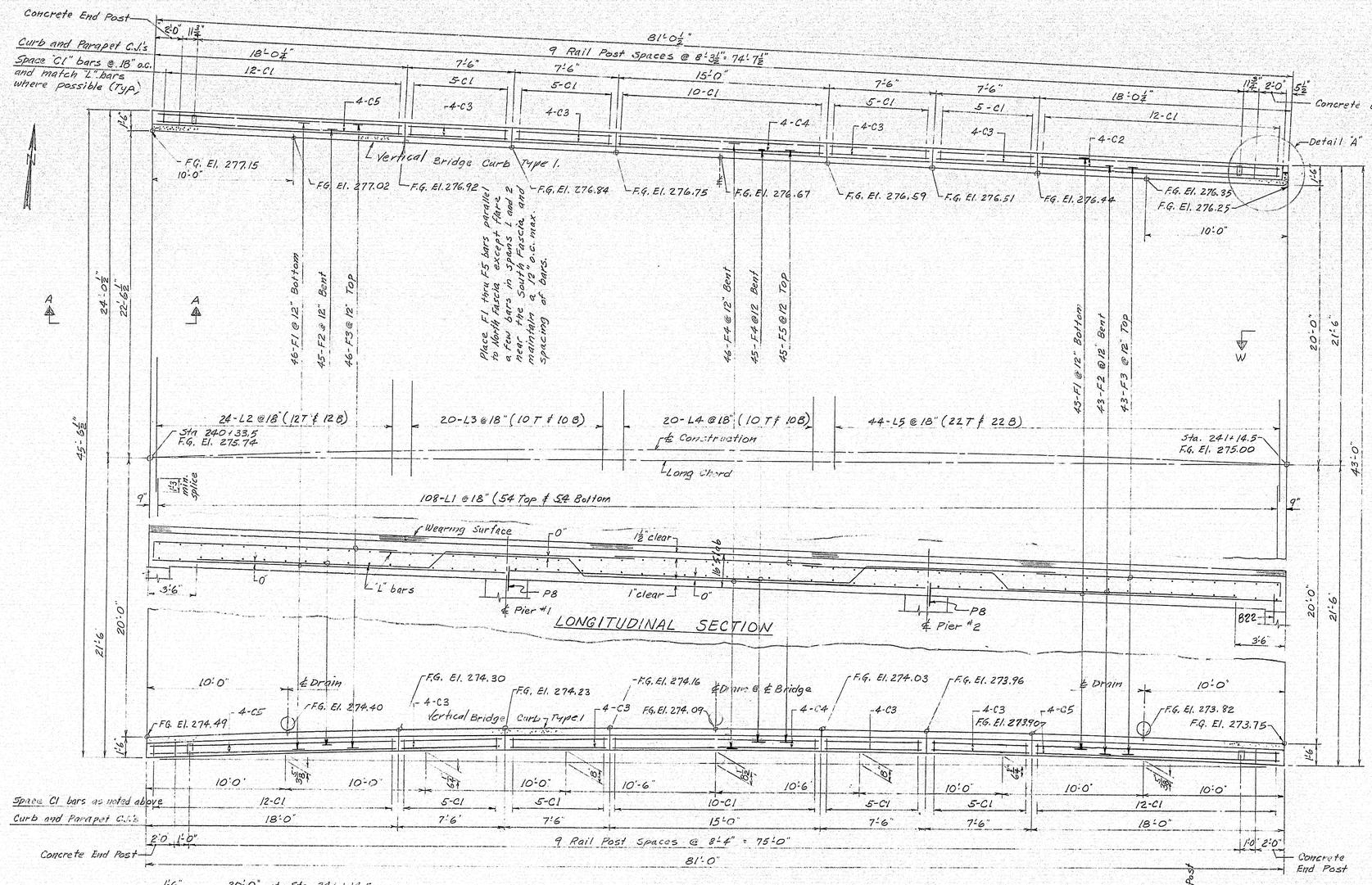
SHEET 8 OF 10 AUGUSTA, MAINE SEPT. 1963

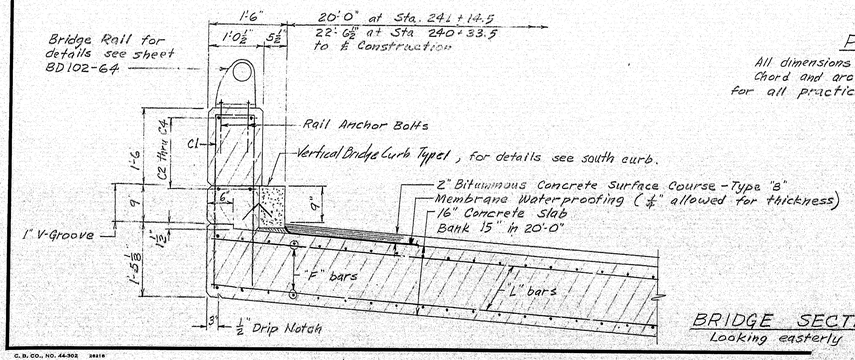
C. B. CO., NO. 44-302 28818

M-24-17
BRIDGE NO. - HARRISON (19)



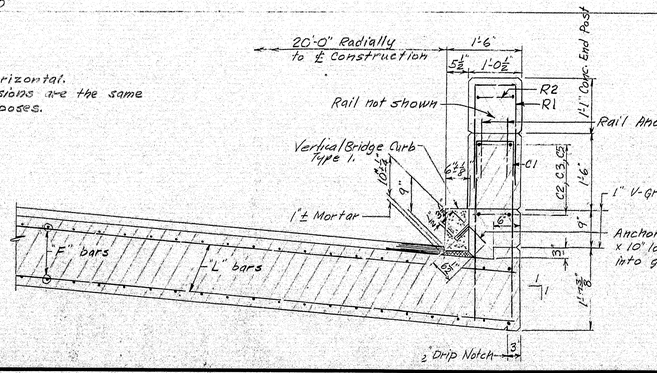
| B. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | S-010-1(14) | 29 | 128 |

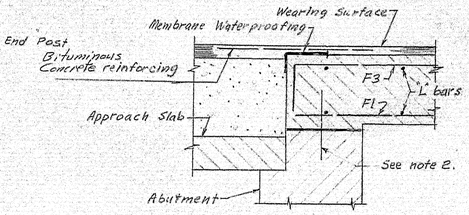


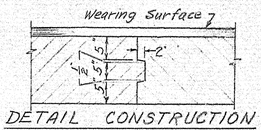

## BRIDGE SECTION
Looking easterly

## PLAN
All dimensions are horizontal.
Chord and arc dimensions are the same for all practical purposes.

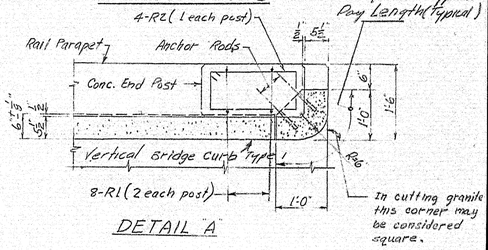



## SECTION W-W



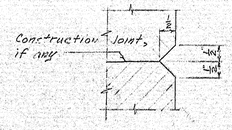

## DETAIL CONSTRUCTION JOINT IN SLAB




## DETAIL "A"

## SUPERSTRUCTURE NOTES

1. At Abutment #1 provide ⅛ inch thickness of heavy roofing under slab to allow the slab to expand.
2. At Abutment #2 provide 822 reinforcing bars in bridge seat to fix slab to abutment.
3. The Abutment #2 is detailed to provide one-half (½) inch clear opening between the sides of the superstr. and the abutment. Cover this opening on the back side as specified in General Abutment Note No. 1, sheet 6.
4. Construction joints in curbs and rail parapets shall have the bond broken between concrete sections by coating surface with a suitable grade of asphalt paint. A 1" V-groove shall be formed on top, inside and outside face of rail parapet and outside face of curb and slab at each vertical joint. Provide joints in granite bridge curb at curb and parapet C.J.'s.
5. For Section A-A see Abutment #1 sheet 6.
6. At the contractors request the concrete in the superstructure slab may be placed in more than one (1) continuous operation. If more than one operation is used, then a joint or joints in accordance with Detail Construction Joint in Slab shall be made at the location or locations designated by the Engineer.




| | |
|---|---|
| DESIGN- CDH | BRIDGE NO. |
| TRACE- | SURVEY- |
| CHECK- | PLOT- |

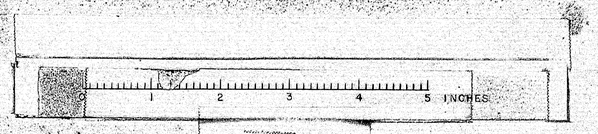
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

# BEAR RIVER BRIDGE
IN THE TOWN OF
# HARRISON
# CUMBERLAND COUNTY
SUPERSTRUCTURE

SHEET 9 OF 10 AUGUSTA, MAINE SEPT. 1963

C. B. CO., NO. 44-302 28218

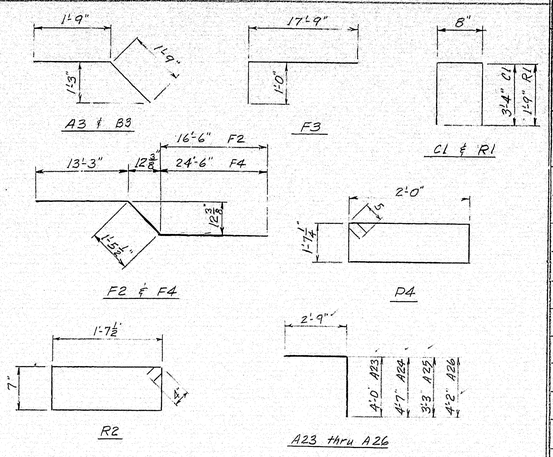
M-2418 BRIDGTON - HARRISON (19)



# REINFORCING STEEL SCHEDULE

| B. P. R. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | F-019-1(4) | 10 | 12 |

## BENT BARS




| MARK | SIZE | NO. | LENGTH | LOCATION |
|---|---|---|---|---|
| A3 | #6 | 30 | 3'-6" | Abutment #1 - Approach slab dowel |
| B3 | #6 | 28 | 3'-6" | Abutment #2 - do |
| F2 | #9 | 88 | 31'-3" | Superstructure slab - longitudinal bars |
| F3 | #6 | 89 | 18'-9" | do |
| F4 | #8 | 91 | 39'-3" | do |
| C1 | #4 | 108 | 7-4" | Curbs |
| R1 | #4 | 8 | 4'-2" | End Post |
| R2 | #4 | 4 | 5'-1" | do |
| P4 | #5 | 174 | 8'-1 | Pier caps |
| | | | | |
| A23 | #5 | 7 | 6'-9" | Abutment #1 - vertical wall |
| A24 | #5 | 7 | 7'-4" | do |
| A25 | #5 | 8 | 6'-0" | do |
| A26 | #5 | 9 | 6'-11" | do |

## STRAIGHT BARS

| MARK | SIZE | NO. | LENGTH | LOCATION |
|---|---|---|---|---|
| A1 | #6 | 178 | 14'-8" | Abutment #1 - Approach slab |
| A2 | #4 | 40 | 22'-6" | do - do |
| A4 | #5 | 70 | 2'-6" | do - Footing dowels |
| A5 | | 2 | 6'-8" | do - Vertical wall |
| A6 | | 2 | 5'-11" | do do |
| A7 | | 2 | 5'-6" | do do |
| A8 | | 2 | 6'-3" | do do |
| A9 | | 7 | 5'-6" | do do |
| A10 | | 7 | 5'-9" | do do |
| A11 | | 8 | 4'-10" | do do |
| A12 | | 9 | 5'-4" | do do |
| A13 | #4 | 2 | 22'-2" | do - Horizontal wall |
| A14 | | 1 | 21'-3" | do do |
| A15 | | 1 | 12'-0" | do do |
| A16 | | 1 | 11'-8" | do do |
| A17 | | 3 | 23'-9" | do do |
| A18 | | 4 | 2'-3" | do - top wing |
| A19 | #6 | 12 | 26'-1" | do - Footing |
| A20 | #6 | 12 | 24'-7" | do do |
| A21 | #6 | 104 | 5'-0" | do do |
| A22 | #6 | 31 | 3'-0" | do - Backwall vertical |
| A27 | #4 | 6 | 26'-5" | do - Horiz. wall spliced |
| A28 | #4 | 6 | 24'-7" | do - do |
| A29 | #6 | 4 | 1'-0" | do - Granite Bridge Curb |
| F1 | #6 | 89 | 25'-2" | Superstructure slab - longitudinal bars |
| F5 | | 45 | 14'-10" | do - do |
| L1 | | 108 | 20'-0" | do - transverse bars |
| L2 | | 24 | 26'-6" | do do |
| L3 | | 20 | 25'-6" | do do |
| L4 | | 20 | 24'-9" | do do |
| L5 | | 44 | 24'-0 | do do |
| | | | | |
| C2 | #4 | 4 | 16'-10" | Curbs |
| C3 | | 32 | 7'-2" | do |
| C4 | | 8 | 14'-8" | do |
| C5 | | 12 | 17'-8" | do |

## STRAIGHT BARS

| MARK | SIZE | NO. | LENGTH | LOCATION |
|---|---|---|---|---|
| B1 | #6 | 168 | 14'-8" | Abutment #2 - Approach slab |
| B2 | #4 | 40 | 21'-3" | do - do |
| B4 | #5 | 64 | 2'-6" | do - Footing dowels |
| B5 | | 2 | 5'-8" | do - Vertical wall |
| B6 | | 2 | 6'-3" | do do |
| B7 | | 2 | 6'-2" | do do |
| B8 | | 2 | 6'-6" | do do |
| B9 | | 14 | 3'-11" | do do |
| B10 | | 14 | 3'-2" | do do |
| B11 | | 14 | 4'-6" | do do |
| B12 | | 14 | 3'-10" | do do |
| B13 | #4 | 2 | 12'-8" | do - Horizontal wall |
| B14 | | 6 | 23'-8" | do do |
| B15 | | 2 | 23'-9" | do do |
| B16 | | 2 | 12'-0" | do do |
| B17 | | 4 | 25'-1" | do do |
| B18 | | 4 | 2'-3" | do - Top Wing |
| B19 | #6 | 12 | 24'-9" | do - Footing |
| B20 | | 12 | 23'-7" | do do |
| B21 | | 98 | 5'-0" | do do |
| B22 | | 21 | 2'-0" | do - Bridge seat |
| | | | | |
| P1 | #7 | 5 | 43'-8" | Pier #1 cap |
| P2 | #8 | 4 | 43'-8" | do |
| P3 | #6 | 2 | 43'-8" | do |
| P5 | #7 | 5 | 42'-8" | Pier #2 cap |
| P6 | #8 | 4 | 42'-8" | do |
| P7 | #6 | 2 | 42'-8" | do |
| P8 | #6 | 87 | 2'-0" | Pier #1 & #2 cap |

## NOTES

1. All bars shall be Intermediate Grade Steel.
2. All dimensions are to the centerlines of bars.

DESIGN- CDH
TRACE-
CHECK- Hales

BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

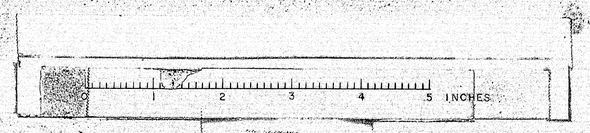
**BEAR RIVER BRIDGE**
IN THE TOWN OF
**HARRISON**
**CUMBERLAND COUNTY**

REINFORCING STEEL SCHEDULE

SHEET 10 OF 10 AUGUSTA, MAINE SEPT. 1963

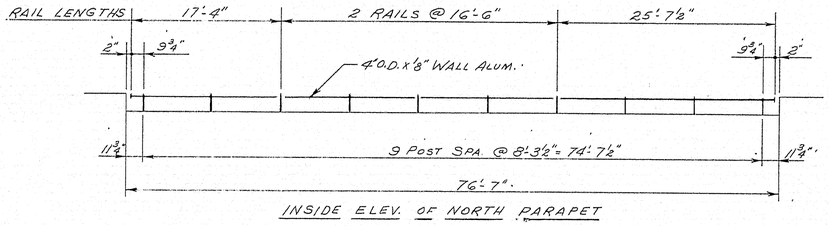
M-2419

C. B. CO., NO. 44-302 28216

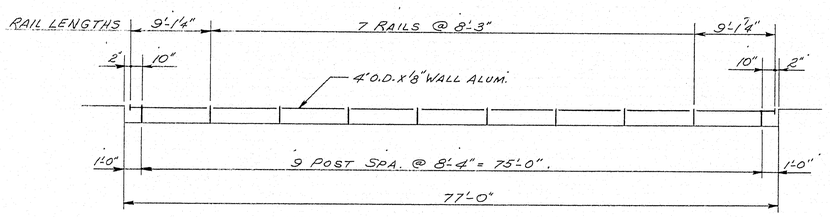


## BILL OF MATERIAL

| MARK NO. | PC. NO. | NO. REQD. | DESCRIPTION | LENGTH FT. | LENGTH IN. | REMARKS |
|---|---|---|---|---|---|---|
| | | | FOR SPECS. SEE DWG. LB-1 | | | |
| | | 20 | POSTS - FOSTER # FF108 W/SET SCREWS | | | W/TEST CAPS |
| | | 4 | END CAPS # 7172-4 | | | W/SET SCREWS |
| AB-1 | | | ANCHOR BOLTS | | | |
| | | 80 | 3/4" HEX. HD. MACH. BOLTS, GALV. | 1 | 0 | |
| | | 80 | 3/4" REG. HEX. NUTS, GALV. | | | |
| | | 80 | 3/4" FLAT WASHERS, GALV. | | | |
| | | 80 | FABRIC WASHER 2" O.D. X | | | 3/16" X 13/16" I.D. |
| | | 1 | 4" O.D. X 1/8" WALL ALUM. X | 25 | 7 1/2 | |
| | | 1 | | 17 | 4 | |
| | | 2 | | 16 | 6 | |
| | | 2 | | 9 | 1/4 | |
| | | 7 | | 8 | 3 | |
| | | | ALUMINUM IMPREGNATED CAULKING COMPOUND | | | |



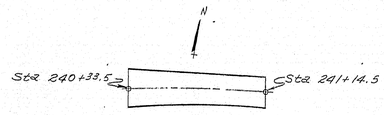

INSIDE ELEV. OF NORTH PARAPET




INSIDE ELEV. OF SOUTH PARAPET

NOTE:

FOR GENERAL NOTES & TYPICAL DETAILS SEE DWG LB-1
THIS DRAWING IS NOT TO SCALE.
LENGTH OF RAILING ON THIS SHEET = 152'-11" PAY LENGTH.
SPLICE GAP = POST = 1".




BEAR RIVER BRIDGE

FIELD FITTAGE IS BASED UPON THE CONTRACTOR SETTING AND SPACING THE ANCHOR BOLTS TO THE MEASUREMENTS SHOWN ON THE APPROVED SHOP DRAWINGS. THE L. B. FOSTER CO. WILL NOT BE LIABLE TO AN EXTRA FOR WORK NECESSITATED BY ANY OTHER SETTING AND SPACING.

111-83

APPROVED: 3/11/65 C.L.P.

L. B. FOSTER CO.
ATLANTA — CHICAGO — HOUSTON — LOS ANGELES — NEW YORK — PITTSBURGH

FOR: H. B. FLEMING, INC.
MAINE STATE HIGHWAY DEPARTMENT
CUMBERLAND COUNTY - PROJ # F-019-1(4)
ALUMINUM PARAPET RAILING FOR: BEAR RIVER BRIDGE IN THE TOWN OF HARRISON

MADE AGB DATE 3-8-65 JOB NO. AL5265 ORDER NO. N07871
CHECK JRP DATE 3/9/65 DRAWING LB-2 (LAST) CUSTOMER'S NO.

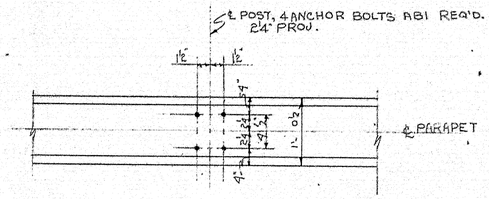
Bear River Bridge Harrison

| | | |
|---|---|---|
| 3/10/65 AGB | PAY LGTH. DEDUCTED 1 IN. | |

REVISIONS

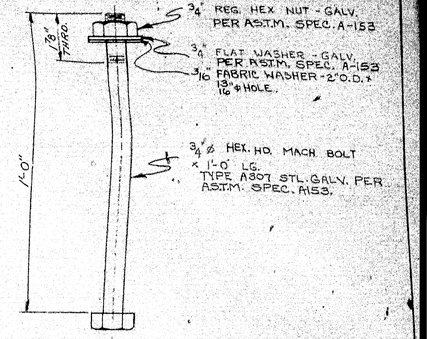
INSPECTION BY

BRUNING




TYPICAL ANCHOR BOLT SETTING

4 - 7172-4 END CAPS
W/ SET SCREWS

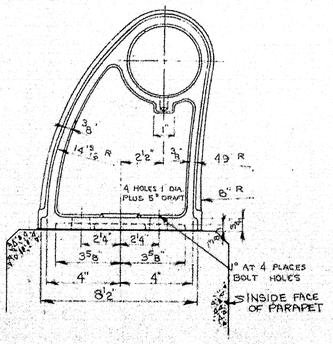


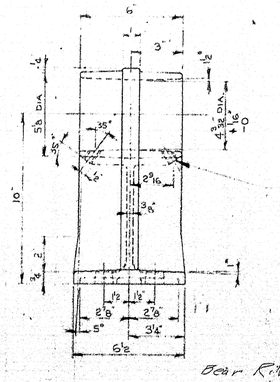

80 - ANCHOR BOLTS-ABI

## GENERAL NOTES:

1. RAILING POSTS SHALL BE ALUMINUM ALLOY PERMANENT MOLD CASTINGS (A356-T6) CONFORMING TO A.S.T.M. SPEC. B108 ALLOY SG70B, CONDITION T6.
2. RAILING SHALL BE ALUMINUM ALLOY EXTRUDED TUBE (6061-T6) CONFORMING TO ASTM. SPEC. B236, ALLOY GS11A, CONDITION T6.
3. RAILING SHALL BE CONTINUOUS FOR A MINIMUM OF TWO OR MORE PANEL LENGTHS. FOR TUBES TWO OR MORE PANELS LONG SET SCREWS TO BE TIGHT AT ONE INTERIOR POST AND TO BEAR AT ALL OTHER POSTS. WHERE TUBES ARE NOT CONTINUOUS THRU POSTS LEAVE A ONE INCH GAP AT CENTERLINE OF POST.
4. ALUMINUM RAIL POST CASTING SHALL BE FURNISHED WITH AN INTEGRALLY CAST TEST COUPON FOR TENSION TEST SPECIMEN.
5. RAIL ON CURVES OF MORE THAN 150 FT. AND LESS THAN 2700 FT. SHALL BE STRAIGHT AND OF ONE PANEL LENGTH.

NOTE:
BOTTOMS OF POSTS & INSIDE OF ANCHOR BOLT HOLES SHALL BE THOROUGHLY COATED WITH AN ALUMINUM IMPREGNATED CAULKING COMPOUND.




SUPPLIER TO FURNISH (2) ½"ϕ-13 N.C. x ⅝" LG. HEX SOCKET HEADLESS SET SCREWS - ALUM. ALLOY (2024-T4) PER A.S.T.M. B211 ALLOY CG42A-T4 WITH #205 ALUMILITE FINISH.

20 - FOSTER FF-108 POSTS
W/ TEST COUPONS

Bear River Bridge Harrison

7/1-82

APPROVED: 3/11/65 C.L.P.

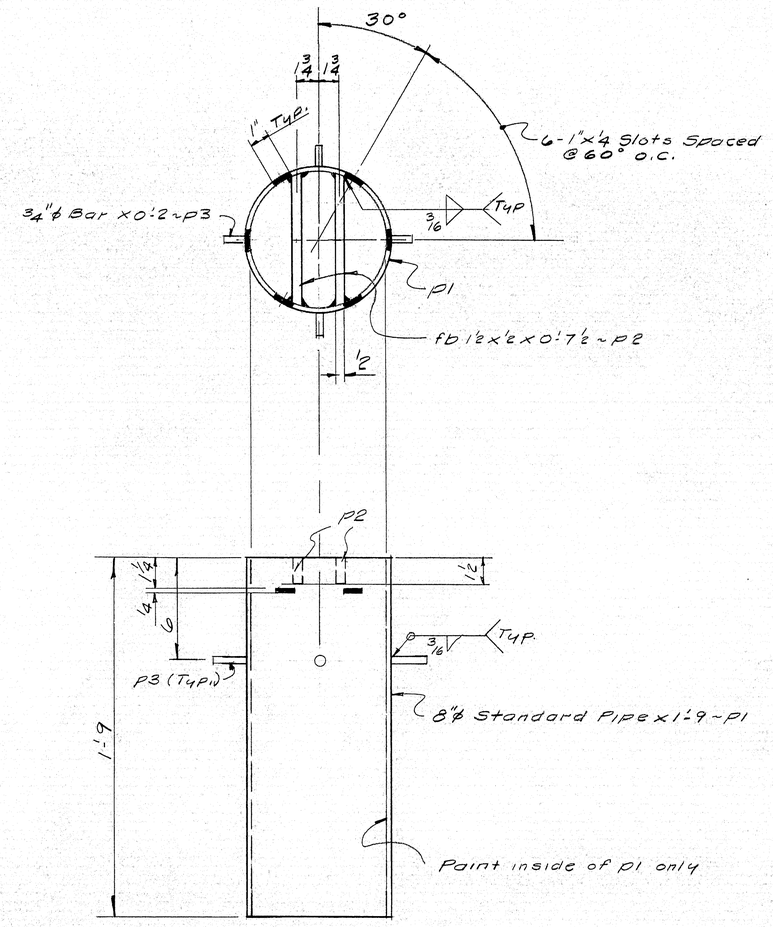
L. B. FOSTER CO.
ATLANTA – CHICAGO – HOUSTON – LOS ANGELES – NEW YORK – PITTSBURGH

FOR: H.B. FLEMING, INC.
MAINE STATE HIGHWAY DEPT.
CUMBERLAND COUNTY - PROJ.# F-013-1(4)
ALUMINUM PARAPET RAILING
GENERAL NOTES & TYPICAL DETAILS

MADE AGS DATE 3/8/65 JOB NO. AL-5265 ORDER NO. NOT YET
CHECK KP DATE 3/9/65 DRAWING LB-1 CONTRACT NO.

INSPECTION BY

REVISIONS




DRAIN DR ~ 3 REQ'D.

See State's Superstructure Sheet for Location

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | REMARKS |
|---|---|---|---|---|---|---|
| A1 | 2 | | L 6x4x3/8 | 43 0 | | No Fab., No Paint |
| A2 | 2 | | do | 42 0 | | do do |
| | | | | | | PIER ANGLES |
| DR | 3 | | Shop Assy | — | | |
| | 3 | P1 | 8"ϕ Std. Pipe | 1 9 | | |
| | 6 | P2 | Fb 1/2 x 1/2 | 0 7 1/2 | | |
| | 12 | P3 | 3/4"ϕ Bar | 0 2 | | |
| | | | ITEM 702/103 | | | |

Ref. Sheet 8

SHOP CONNECTIONS: WELDED
FIELD CONNECTIONS:
HOLES: 4"x1" Slots
PAINT: PER MAINE STATE SPECS. RED LEAD & OIL UNLESS NOTED

APPROVED 8-12-64

DRAIN DETAILS

Bancroft & Martin Inc.
South Portland 7, Maine

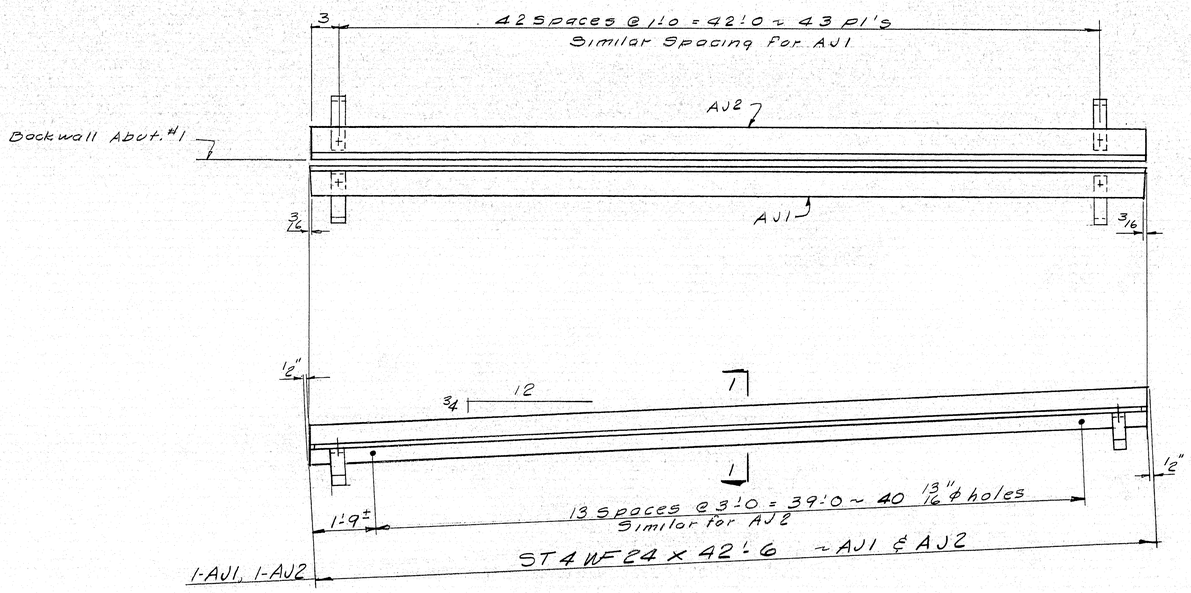
BEAR RIVER BRIDGE
HARRISON, MAINE

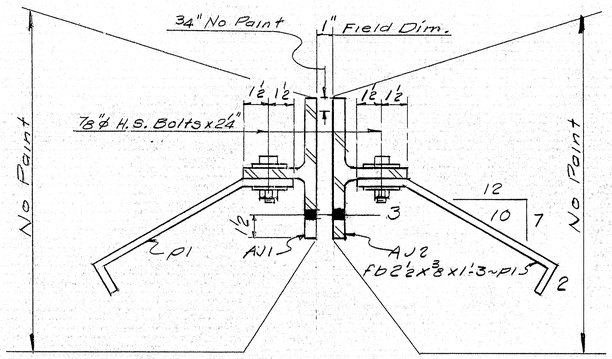
CUSTOMER H.B. FLEMING, INC.
DESIGNER ME.S.H.C. (BRIDGE DIV.)

ORDER NO. VERBAL DWG. NO. 64-271-S1

| | | |
|---|---|---|
| DRAWN | 8-10-64 | T.F.G. |
| REVISION | | |
| REVISION | | |
| REVISION | | |

94-20




SECTION 1-1

| SHIP MARK | NO. | MARK | SHAPE | LENGTH | WT. | REMARKS |
|---|---|---|---|---|---|---|
| AJ1 | 1 | | ST 4 WF 24 | 42 6 | | |
| AJ2 | 1 | | do | 42 6 | | |
| | 86 | P1 | PL 2½ x 3/8 | 1 3 | | Bent |
| | 86 | Shop | 7/8" Bolts | 0 24 | | High Strength Bolts |
| | 86 | do | 7/8" Hard Washers | | | Hard Washers |

ITEM NO. 702 / 103

Ref. dwgs. SHEET 6 & BD-104-64

SHOP CONNECTIONS: BOLTED
FIELD CONNECTIONS: —
HOLES: 13/16" ϕ FOR H.S. BOLTS
PAINT: PER MAINE STATE SPECS. RED LEAD & OIL UNLESS NOTED

APPROVED 8-12-64

ARMORED JOINT DETAILS

Bancroft & Martin Inc.
South Portland 7, Maine

BEAR RIVER BRIDGE
HARRISON, MAINE

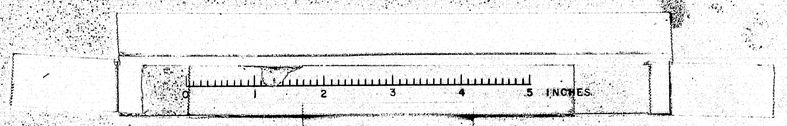
CUSTOMER H.B. FLEMING, INC.
DESIGNER M.E.S.H.C. (BRIDGE DIV.)

| | | |
|---|---|---|
| DRAWN | 8-10-64 | TFG |
| REVISION | 1-27-65 | TFG |
| REVISION | | |
| REVISION | | |

ORDER NO. VERBAL | DWG. NO. 64-271-S2

94-21

PRINTED BY MAILING HOME CO., BOSTON, MASS.



3316.00

| PIN | F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 3316.00 | 1 | MAINE | F-STP-019P(17)X | 1 | 19 |

BRIDGTON - HARRISON

# STATE OF MAINE
# DEPARTMENT OF TRANSPORTATION

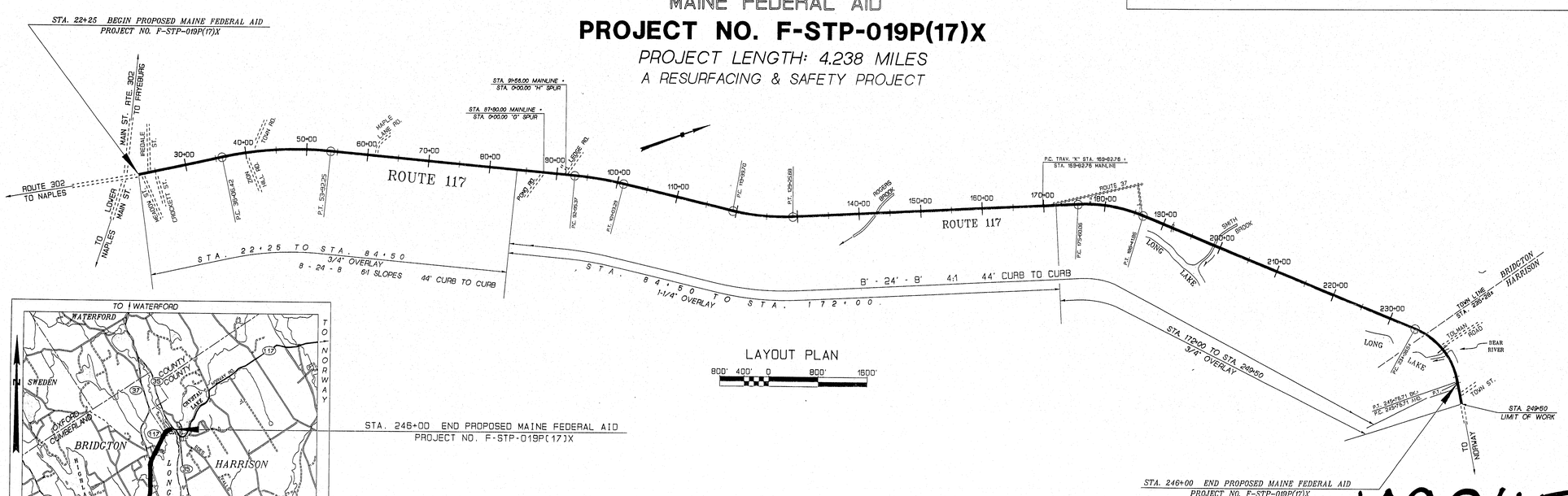
Reel 279

*PLANS*

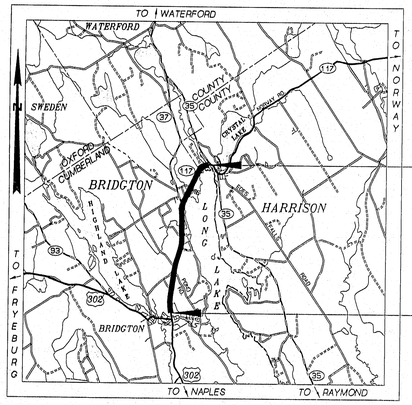
## BRIDGTON - HARRISON
### CUMBERLAND COUNTY
MAINE FEDERAL AID
### PROJECT NO. F-STP-019P(17)X
*PROJECT LENGTH: 4.238 MILES*
*A RESURFACING & SAFETY PROJECT*

*INDEX OF SHEETS*

| SHEET NO. | DESCRIPTION |
|---|---|
| 1 | TITLE SHEET |
| 2 | TYPICAL SECTIONS |
| 3 | ESTIMATED QUANTITIES & GENERAL NOTES |
| 4 | CONSTRUCTION NOTES |
| To Print → 5-6 | BRIDGE SHEETS |
| Cut → 7-19 | STANDARD DETAILS |




LAYOUT PLAN
800' 400' 0 800' 1600'




A PORTION OF CUMBERLAND COUNTY
0 1.5 3.0
SCALE IN MILES

STA. 246+00 END PROPOSED MAINE FEDERAL AID
PROJECT NO. F-STP-019P(17)X

STA. 22+25 BEGIN PROPOSED MAINE FEDERAL AID
PROJECT NO. F-STP-019P(17)X

| | | |
|---|---|---|
| A.A.D.T. | 1994 | 5,260 |
| A.A.D.T. | 2004 | 6,840 |
| D.H.V. | | 889 |
| T.(%D.H.V.) | | 6 |
| D.(%D.H.V.) | | 60 |
| V. | | AS POSTED |
| P.S.D.(%) | | N/A |
| 18 KIPS | P 2.5 | 110 |

NOTE

ALL WORK CONTEMPLATED UNDER THIS CONTRACT TO BE GOVERNED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (REVISION OF OCTOBER 1990) AND SUPPLEMENTALS THERETO AS MODIFIED ON THE PLANS AND IN THE SPECIAL PROVISIONS.

APPROVED:

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

COMMISSIONER — DATE 6 - 1 - 1994

CHIEF ENGINEER — DATE 6 - 1 - 1994

Revised "As Built" 1994 DB CARLTON

UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 1

APPROVED:

DIVISION ADMINISTRATOR — DATE

| PROJECT DESIGN ENGINEER | BY | DATE |
|---|---|---|
| PLANS | DESIGN-DETAILED BK | 94 |
| | CHECKED JLH | |
| | REVISIONS | |
| | FIELD CHANGES | |

18JAN94-010100

108-245

BRIDGTON - HARRISON

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | F-STP-019P(173)X | 3 | 18 |

BRIDGTON - HARRISON

## ESTIMATED QUANTITIES

| ITEM NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| 202.127 | REMOVING OF EXISTING BITUMINOUS PAVEMENT (SY) | 1 | LS |
| 203.20 | COMMON EXCAVATION | 325 | CY |
| 202.203 | PAVEMENT BUTT JOINTS | 2,300 | SY |
| 204.41 | REHABILITATION OF EXISTING SHOULDER, PLAN QUANTITY | 280 | SY |
| 206.061 | STRUC EARTH EXCAV.--DRAIN. & MINOR STRUC'S., BELOW GRADE | 50 | CY |
| | | | |
| 304.10 | AGGREGATE SUBBASE COURSE--GRAVEL | 300 | CY |
| | | | |
| 403.07 | HOT BITUMINOUS PAVEMENT, GRADING B | 65 | TONS |
| 403.10 | HOT BITUMINOUS PAVEMENT, GRADING D | 11,120 | TONS |
| 403.101 | HOT BIT. PVMT., GRD D (SIDEWALKS, SHIMS, DRIVES, INCIDENTALS) | 170 | TONS |
| 409.15 | BITUMINOUS TACK COAT, APPLIED | 2,085 | GAL |
| 411.10 | UNTREATED AGGREGATE SURFACE COURSE, TRUCK MEASURE | 20 | CY |
| 424.34 | ASPHALT FIBER CRACK SEALER, APPLIED | 1,160 | GAL |
| | | | |
| 501.35 | PILE REPAIR | 18 | EACH |
| 502.29 | STRUCT. CONC. WEARING SURFACE ON BRIDGES (21 CY) | 1 | LS |
| 502.4711 | SILICA FUME ADDITIVE (824 LB) | 1 | LS |
| | | | |
| 514.06 | CURING BOX FOR CONCRETE CYLINDERS | 1 | EACH |
| 516.30 | REHAB. OF STRUCT. CONC. SLAB--TO REINFORCING STEEL | 130 | SF |
| 516.31 | REHAB. OF STRUCT. CONC. SLAB--TO BELOW REINFORCING STEEL | 100 | SF |
| 516.32 | REHAB. OF STRUCT. CONC. SLAB--FULL DEPTH | 100 | SF |
| 526.301 | TEMPORARY CONCRETE BARRIER TYPE I | 1 | LS |
| 527.32 | PORTABLE CRASH BARRELS | 12 | EACH |
| | | | |
| 603.151 | 12 INCH CORRUGATED METAL PIPE | 6 | LF |
| 603.161 | 15 INCH CORRUGATED METAL PIPE | 136 | LF |
| 603.171 | 18 INCH CORRUGATED METAL PIPE | 12 | LF |
| 603.191 | 24 INCH CORRUGATED METAL PIPE | 18 | LF |
| * 603.7418 | REMOVE AND RELAY 18 INCH CONCRETE PIPE | 8 | LF |
| | | | |
| 604.161 | ALTERING CATCH BASIN | 24 | EACH |
| * 605.09 | 6 INCH UNDERDRAIN TYPE B | 100 | LF |
| 605.10 | 6 INCH UNDERDRAIN OUTLET | 200 | LF |
| | | | |
| 606.17 | GUARD RAIL TYPE 3b--SINGLE RAIL | 3,875 | LF |
| 606.1732 | BRIDGE CONNECTION TYPE 2 | 4 | EACH |
| 606.22 | GUARD RAIL TYPE 3b--OVER 15 FOOT RADIUS | 235 | LF |
| 606.265 | TERMINAL END--SINGLE RAIL--GALVANIZED STEEL | 6 | EACH |
| 606.35 | GUARD RAIL DELINEATOR POST | 21 | EACH |
| 606.351 | GUARD RAIL DELINEATOR POST REMOVE AND RESET | 16 | EACH |
| 606.47 | SINGLE WOOD POST | 6 | EACH |
| 606.51 | MULTIPLE MAILBOX POST | 1 | EACH |
| 606.751 | WIDEN SHOULDER FOR BREAKAWAY CABLE TERMINAL | 12 | EACH |
| 606.77 | BREAKAWAY CABLE TERMINAL | 12 | EACH |
| | | | |
| 609.237 | TERMINAL CURB TYPE 1 - 7 FOOT | 2 | EACH |
| 609.31 | CURB TYPE 3 | 550 | LF |
| 609.38 | RESET CURB TYPE 1 | 16 | LF |
| | | | |
| 610.08 | PLAIN RIPRAP | 60 | CY |
| 610.09 | HAND LAID RIPRAP | 10 | CY |
| 612.06 | BITUMINOUS SEALING--BLACK | 1,500 | SY |
| 613.319 | TEMPORARY EROSION CONTROL BLANKET | 9,800 | SY |
| 615.07 | LOAM | 20 | CY |
| 616.08 | SODDING | 20 | SY |
| 618.13 | SEEDING METHOD NUMBER 1 | 10 | UNIT |
| 618.14 | SEEDING METHOD NUMBER 2 | 330 | UNIT |
| 618.141 | SEEDING METHOD NUMBER 3 | 22 | UNIT |
| 618.25 | APPLIED WATER | 16 | MG |
| 619.12 | MULCH | 372 | UNIT |
| 620.58 | EROSION CONTROL GEOTEXTILE | 300 | SY |
| | | | |
| 627.61 | 4 INCH SOLID WHITE PAVEMENT MARKING LINE | 45,500 | LF |
| 627.63 | 4 INCH SOLID YELLOW PAVEMENT MARKING LINE | 25,100 | LF |
| 627.64 | 4 INCH BROKEN YELLOW PAVEMENT MARKING LINE | 13,500 | LF |
| 627.68 | TEMP. 4" PAINTED PAVEMENT MARKING LINE, YELLOW OR WHITE | 77,000 | LF |
| | | | |
| 629.05 | HAND LABOR, STRAIGHT TIME | 350 | MH |
| 631.10 | AIR COMPRESSOR (INCLUDING OPERATOR) | 10 | HOUR |
| 631.11 | AIR TOOL (INCLUDING OPERATOR) | 10 | HOUR |
| 631.12 | ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR) | 350 | HOUR |
| 631.14 | GRADER (INCLUDING OPERATOR) | 10 | HOUR |
| 631.172 | TRUCK--LARGE (INCLUDING OPERATOR) | 700 | HOUR |
| 631.22 | FRONT END LOADER (INCLUDING OPERATOR) | 10 | HOUR |
| 631.32 | CULVERT CLEANER (INCLUDING OPERATOR) | 140 | HOUR |
| 631.36 | FOREMAN | 70 | MH |

* UNDETERMINED LOCATIONS

## ESTIMATED QUANTITIES

| ITEM NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| 639.18 | FIELD OFFICE TYPE A | 1 | EACH |
| 639.22 | TESTING FACILITIES BITUMINOUS MIXES | 1 | LS |
| 639.23 | TESTING FACILITIES CONCRETE | 1 | LS |
| | | | |
| 643.72 | TEMPORARY TRAFFIC SIGNAL: | 1 | LS |
| | | | |
| 652.31 | TYPE I BARRICADE | 25 | EACH |
| 652.311 | TYPE II BARRICADE | 15 | EACH |
| 652.33 | DRUM | 75 | EACH |
| 652.34 | CONE | 75 | EACH |
| 652.35 | CONSTRUCTION SIGNS | 1,100 | SF |
| 652.36 | MAINTENANCE OF TRAFFIC CONTROL DEVICES | 85 | CD |
| 652.38 | FLAGGER | 1,200 | MH |
| 656.50 | BALED HAY, IN PLACE | 132 | EACH |
| 656.51 | SANDBAG, IN PLACE | 132 | EACH |
| 656.631 | 15" TEMPORARY SILT FENCE | 1,600 | LF |
| 656.632 | 30" TEMPORARY SILT FENCE | 5,500 | LF |
| 656.64 | BOOM SUPPORTED SILT FENCE | 300 | LF |
| | | | |
| 658.20 | ACRYLIC LATEX COLOR FINISH, GREEN | 410 | SY |
| | | | |
| 659.10 | MOBILIZATION | 1 | LS |
| | | | |

## *GENERAL NOTES*

1. ALL UTILITY FACILITES SHALL BE ADJUSTED BY THE RESPECTIVE UTILITIES UNLESS NOTED.

2. WHERE DITCHING IS CALLED FOR ON THE PLANS OR BY THE ENGINEER, THE DITCH SHALL GENERALLY CONFORM TO THE ORIGINAL TEMPLATE. THE ORIGINAL CONSTRUCTION PROJECTS ARE F-019-1(4) AND F-019-1(2) AND IS AVAILABLE UPON REQUEST.

3. REQUIRED DITCH PROTECTION SHOWN ON THE PLANS IS FOR ESTIMATING PURPOSES ONLY. ACTUAL TYPE AND LOCATION FOR EROSION CONTROL BLANKET, SOD, STONE DITCH PROTECTION, AND RIPRAP SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

4. WHERE DEEMED NECESSARY BY THE ENGINEER, WINTER SAND SHALL BE REMOVED FROM THE EDGES OF SHOULDERS AND PLACED IN DESIGNATED AREAS OR DISPOSED OF. PAYMENT WILL BE MADE UNDER THE APPROPRIATE HOURLY RENTAL ITEMS.

5. PAVED ENTRANCES SHALL BE CONSTRUCTED WITH:
   2" HOT BITUMINOUS PAVEMENT.

6. UNPAVED ENTRANCES SHALL BE CONSTRUCTED WITH:
   A VARIABLE DEPTH OF UNTREATED AGGREGATE SURFACE COURSE

7. GRASSED ENTRANCES SHALL BE CONSTRUCTED WITH:
   2" LOAM, SEED & MULCH

8. A 3' PAVED LIP SHALL BE PLACED AT ALL GRAVEL ENTRANCES EXCEPT WOODS AND FIELD ENTRANCES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

9. ANY EXISTING PAVED SIDE ROADS OR SHOULDERS SHALL BE RESURFACED AS DETERMINED IN THE FIELD BY THE ENGINEER.

10. A VARIABLE DEPTH SHIM COURSE (ITEM 403.10) SHALL BE APPLIED PRIOR TO PLACING THE 3/4" OR 1-1/4" HOT BITUMINOUS PAVEMENT.

11. EXISTING CULVERTS TO REMAIN SHALL BE CLEANED AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE UNDER ITEM 631.32 CULVERT CLEANER (INCLUDING OPERATOR).

12. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE ENGINEER.

13. AS DIRECTED BY THE ENGINEER, ALL EXISTING UNDERDRAIN OUTLETS SHALL BE LOCATED, CLEANED OUT AND DITCHED AS REQUIRED OR REPLACED AS NECESSARY.

14. A 3' SQUARE RIPRAP PAD SHALL BE CONSTRUCTED AT U.D. OUTLETS.

15. ONE GUARDRAIL DELINEATOR POST SHALL BE INSTALLED AT EACH GUARDRAIL END AND UNDERDRAIN OUTLET.

16. BREAKAWAY CABLE TERMINALS SHALL BE INSTALLED CONCURRENTLY WITH THE PLACEMENT OF EACH SECTION OF BEAM GUARDRAIL.

17. CURB TYPE 3 TO BE INSTALLED WITH MOLD 1 AND 2, THEN SEALED WITH BITUMINOUS SEALING BLACK, WHEN DIRECTED.

18. UNLESS OTHERWISE NOTED SEEDING METHOD NO. 1 SHALL BE UTILIZED ON ALL LAWNS AND DEVELOPED AREAS; SEEDING METHOD NO. 2 SHALL BE UTILIZED ON ALL NON-GUARDRAIL FORESLOPES FROM THE EDGE OF SHOULDER TO THE DITCH LINE OR TOE OF FILL; SEEDING METHOD NO. 3 SHALL BE UTILIZED ON ALL BACKSLOPES AND ON ALL GUARDRAIL FILL SLOPES.

19. MULCH SHALL BE APPLIED IN AREAS SEEDED BY SEEDING METHOD NO. 3, SEEDING METHOD NO. 2 AND SEEDING METHOD NO. 1.

20. LOAM SHALL BE PLACED TO A NOMINAL DEPTH OF 2 INCHES UNLESS OTHERWISE NOTED OR DIRECTED.

21. LOAM DEPTHS ARE AS FOLLOWS:
    UNDER EROSION CONTROL BLANKET 2"
    SEEDING AREAS METHOD NO. 1 2"
    SEEDING AREAS METHOD NO. 2 2"
    DEPTHS SHOWN ARE NOMINAL
    ADDITIONAL DEPTH MAY BE DESIGINATED BY THE ENGINEER

22. PLACE SOD STRIP 18 IN. WIDE IN THE FOLLOWING LOCATIONS WHEN DIRECTED BY THE ENGINEER:
    BEHIND NEW CURBS IN BOX SECTIONS

23. ACRYLIC LATEX COLOR FINISH GREEN SHALL BE PLACED ON ALL PAVED ISLANDS.

24. ALL PEDESTRIAN RAMPS SHALL BE 6' WIDE.

25. PLAN SHEETS OF PREVIOUSLY CONSTRUCTED PROJECTS IN THIS AREA ARE AVAILABLE ON REQUEST. THESE PROJECTS ARE: F-019-1(2)
    F-019-1(4)

26. TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE UNDER ITEMS 629.05, HAND LABOR; 631.12, ALL PURPOSE EXCAVATOR; AND 631.172, TRUCK LARGE.

27. EXCAVATIONS ACCOMPLISHED AS PART OF THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SUBPART P OF 29 CFR PART 1926.650-.652 (CONSTRUCTION STANDARD FOR EXCAVATIONS).

28. ALL EXISTING GUARDRAIL HARDWARE TO BE REMOVED, EXCEPT CABLE AND WOOD POST SHALL BE THE PROPERTY OF THE STATE AND WILL BE STOCKPILED AT THE BRIDGTON MAINTENANCE LOT ON U.S. ROUTE 302 APPROXIMATELY 0.9 MILES NORTHERLY OF THE BRIDGTON-NAPLES TOWN LINE AND ON THE EASTERLY SIDE OF THE ROAD. GUARDRAIL CABLE AND WOOD POST SHALL BE THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF OFF THE PROJECT. NO SEPARATE PAYMENT WILL BE MADE FOR REMOVAL AND STOCKPILING.

29. ESTIMATED STRUCTURAL EXCAVATION REQUIRED: 15 C.Y.

30. ALL JOINTS BETWEEN EXISTING AND PROPOSED HOT BITUMINOUS PAVEMENT SHALL BE BUTTED. PAYMENT SHALL BE MADE UNDER ITEN 202.203 - PAVEMENT BUTT JOINTS.

31. ANY NECESSARY MODIFICATION OF EXISTING OR PROPOSED REINF. CONC. PIPE TO PROPERLY CONNECT EXTENTIONS TO EXISTING REINF. CONC. PIPE SHALL BE CONSIDERED INCIDENTAL TO ITEM 603..

32. ESTIMATED QUANTITIES FOR REQUIRED STRUCTURAL EARTH EXCAVATION, DRAINAGE AND MINOR STRUCTURES ARE INFORMATIONAL ONLY AND REPRESENT THE APPROXIMATE MINIMUM QUANTITY REQUIRED TO INSTALL DRAINAGE STRUCTURES. ADDITIONAL EXCAVATION FOR THE CONTRACTOR'S CONVENIENCE OR TO COMPLY WITH BACKSLOPING REQUIREMENTS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED INCIDENTAL TO THE RELATED DRAINAGE ITEMS.

PROJECT DESIGN ENGINEER | BY | DATE

PLANS

DESIGN-DETAILED: R. VIGUE
CHECKED: S. MCNEILL
REVISIONS: 4-94
FIELD CHANGES:

05JUN84-010050

As Built 1994 DS Curtis

108-246

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES
AND
GENERAL NOTES

SHEET OF AUGUSTA, MAINE

# CONSTRUCTION NOTES

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | F-STP-019P(17)X | 4 | 19 |

BRIDGTON – HARRISON

## REMOVE BITUMINOUS CURB AT ALL B.C.T. LOCATIONS

REMOVAL OF CURBING TO BE INCIDENTAL TO ITEM 606.

STA. 134+87.5 TO 135+75 RT.
STA. 196+15 TO 196+25 RT.
STA. 203+00 TO 203+15 RT.
STA. 224+75 TO 225+50 RT.
STA. 226+45 TO 226+50 LT.
STA. 229+25 TO 229+35 LT.
STA. 236+59 TO 237+33 RT.
STA. 242+00 TO 242+85 LT.
STA. 242+02 TO 242+77 RT.

## CURB TYPE 3

STA. 0±45 ±15'LT. (ZION HILL RD.) TO 41+20 22'RT. (RTE. 117) 105 L.F.
STA. 23±07 41'RT. TO 23±09 34'RT. 7 L.F.
STA. 23+70 22'RT. TO 23+77 22'RT. 7 L.F.
STA. 23+97 22'RT. TO 24+04 22'RT. 7 L.F.
STA. 24+71 22'RT. TO 24+78 22'RT. 7 L.F.
STA. 25+18 22'RT. TO 25+25 22'RT. 7 L.F.
STA. 25+66 22'RT. TO 25+73 22'RT. 7 L.F.
STA. 25+93 22'RT. TO 26+00 22'RT. 7 L.F.
STA. 26+96 22'RT. TO 27+03 22'RT. 7 L.F.
STA. 27+23 22'RT. TO 27+30 22'RT. 7 L.F.
STA. 27+35 22'RT. TO 27+42 22'RT. 7 L.F.
STA. 27+62 22'RT. TO 27+69 22'RT. 7 L.F.
STA. 28+83 22'RT. TO 28+90 22'RT. 7 L.F.
STA. 29+10 22'RT. TO 29+17 22'RT. 7 L.F.
STA. 29+88 22'RT. TO 29+95 22'RT. 7 L.F.
STA. 33+93 20'RT. TO 34+43 20'RT. 50 L.F.
STA. 243+00 20'RT. TO 243+75 20'RT. 75 L.F.

## TERMINAL CURB TYPE 1

MEADOW ST. - STA. 0±41 ±12' RT. TO 0±48 ±12' RT. 1 EA.
STA. 22+40 22'RT. TO 22+47 22'RT. 1 EA.

## REHABILITATION OF EXISTING SHOULDER

STA. 48+00 TO 52+00 RT. 2' WIDE
STA. 140+86 TO 141+97 LT. 2' WIDE
STA. 141+97 TO 142+47 LT. 2' TO 0' TAPER
STA. 144+46 TO 145+60 LT. 2' WIDE
STA. 196+75 TO 197+30 LT. 2' WIDE
STA. 236+25 TO 237+25 LT. 6' TO 0' TAPER

## ALTER CATCH BASIN TO TYPE A1-C

STA. 21+84 22'LT.
STA. 21+84 22'RT.

## ALTER CATCH BASIN TO TYPE B1-C

STA. 23+28 22'RT. STA. 180+00 LT.
STA. 24+36 22'LT. STA. 180+00 RT.
STA. 25+30 22'RT. STA. 183+30 LT.
STA. 27+70 22'RT. STA. 183+30 RT.
STA. 28+00 22'LT. STA. 185+15 LT.
STA. 52+50 34'LT. STA. 185+15 RT.
STA. 52+80 22'LT. STA. 188+00 LT.
STA. 174+00 RT. STA. 190+91 LT.
STA. 176+55 RT. STA. 190+91 RT.
STA. 176+85 LT. STA. 0+45 LT. (TOLMAN RD.)
STA. 177+70 LT. STA. 243+58 RT.

## 6 INCH UNDERDRAIN OUTLET

- REMOVE AND REPLACE AS NECESSARY

## GUARDRAIL TYPE 3b - SINGLE RAIL

STA. 135+55 TO 143+05 20'RT. 750 L.F.

STA. 142+00 TO 144+50 20'LT. 250 L.F.
STA. 196+25 TO 203+50 20'RT. 725 L.F.
STA. 198+80 TO 204+55 20'LT. 769 L.F.
STA. 221+34 TO 224+97 20'RT. 362.5 L.F.
STA. 226+25 TO 229+25 20'LT. 300 L.F.
STA. 237+20.5 TO 240+33.4 20.4'RT. 312.5 L.F.
STA. 240+10 TO 240+34.9 23'LT. 25 L.F.
STA. 241+17. (20.4'LT.) TO 241+43.3 (22'LT.) 50 L.F.
STA. 241+14.6 (20.4'RT.) TO 242+39.1 (20'RT.) 125 L.F.

## MULTIPLE MAILBOX POST

STA. 119+67 LT. 1 EA.

## GUARDRAIL TYPE 3b - OVER 15 FOOT RADIUS

STA. 141+98 36'LT. TO 142+14 20'LT. 16'RAD. 25 L.F.
STA. 204+50 20'LT. TO 204+66 36'LT. 16'RAD. 25 L.F.
STA. 0±82 ±17'RT (TOLMAN RD.) TO 240±22.4 22'LT. (RTE. 117) 50'RAD. 50 L.F.

## TERMINAL END - SINGLE RAIL - GALVANIZED STEEL

STA. 140+70 36'LT. STA. 144+78.5 36'RT.
STA. 141+77 36'LT. STA. 145+55 36'LT.
STA. 141+98 36'RT. STA. 204+66 36'LT.

## GUARDRAIL DELINEATOR POSTS

GUARDRAIL SECTION
STA. 141+61 LT. 1 EA.
STA. 142+14 LT. 1 EA.
ISLAND LOCATIONS
STA. 148+80 RT. 1 EA.
STA. 149+78 RT. 1 EA.
STA. 227+10 RT. 1 EA.
STA. 229+30 RT. 1 EA.
BACK EDGE OF SCENIC TURNOUT
STA. 225+95 RT. 1 EA.
STA. 230+25 RT. 1 EA.
UNDERDRAIN OUTLET LOCATIONS
STA. 53+00 RT. 1 EA.
STA. 88+28 LT. 1 EA.
STA. 84+25 RT. 1 EA.
STA. 95+00 LT. 1 EA.
STA. 118+07 RT. 1 EA.
STA. 136+50 LT. 1 EA.
STA. 220+55 RT. 1 EA.
STA. 221+35 LT. 1 EA.
STA. 241+00 LT. 1 EA.
STA. 242+00 RT. 1 EA.
BEGINNING OF CURB
STA. 31+00 LT. 1 EA.
STA. 52+00 LT. 1 EA.
STA. 55+50 LT. 1 EA.

## GUARDRAIL DELINEATOR POSTS - REMOVE AND RESET

STA. 135+62.5 RT. 1 EA. STA. 221+25 RT. 1 EA.
STA. 140+86 LT. 1 EA. STA. 224+75 RT. 1 EA.
STA. 144+62.5 RT. 1 EA. STA. 226+50 LT. 1 EA.
STA. 145+39 LT. 1 EA. STA. 229+25 LT. 1 EA.
STA. 196+25 RT. 1 EA. STA. 237+33.4 RT. 1 EA.
STA. 196+75 LT. 1 EA. STA. 240+22.4 LT. 1 EA.
STA. 203+00 RT. 1 EA. STA. 242+00 LT. 1 EA.
STA. 204+50 LT. 1 EA. STA. 242+02 RT. 1 EA.

## DITCHOUT

STA. 84+20 RT. STA. 160+20 RT.
STA. 89+93 RT. STA. 193+50 RT.
STA. 126+25 RT. STA. 207+85 LT.
STA. 130+25 RT. STA. 241+50 LT.
STA. 133+25 RT.

## WIDEN SHOULDER FOR B.C.T.

STA. 144+37.5 TO 145+25 RT.
STA. 195+50 TO 196+37.5 RT.
STA. 198+00 TO 196+87.5 LT.
STA. 202+87.5 TO 203+75 RT.
STA. 220+50 TO 221+37.5 RT.

STA. 225+75 TO 226+62.5 LT.
STA. 229+12.5 TO 230+00 LT.

## BREAKAWAY CABLE TERMINAL

STA. 135+37.5 24'RT. TO 135+62.5 20'RT.
STA. 196+00 24'RT. TO 196+25 20'RT.
STA. 196+50 24'LT. TO 196+75 20'LT.
STA. 203+00 20'LT. TO 203+25 24'RT.
STA. 221+00 24'RT. TO 221+25 20'RT.
STA. 193+30 20'RT. TO 193+55 24'RT.
STA. 226+25 24'LT. TO 226+50 20'LT.
STA. 229+25 20'LT. TO 229+50 24'LT.
STA. 237+08.4 24'RT. TO 237+33.4 20'RT.
STA. 196+75 20 RT. TO 196+100 26'RT.
STA. 242+00.2 22'LT. TO 242+25.2 26'LT.
STA. 242+64 20'RT. TO 242+87 24'RT.

## TEMPORARY EROSION CONTROL BLANKET

STA. 98+75 TO 105+25 LT.
STA. 98+75 TO 100+50 RT.
STA. 109+25 TO 111+25 LT.
STA. 111+25 TO 112+80 RT.
STA. 111+50 TO 114+75 LT.
STA. 115+90 TO 117+50 RT.
STA. 116+90 TO 123+40 LT.
STA. 123+60 TO 125+80 LT.
STA. 127+50 TO 129+50 RT.
STA. 130+00 TO 133+50 RT.
STA. 134+70 TO 138+35 LT.
STA. 138+70 TO 143+00 LT.
STA. 147+75 TO 148+25 RT.
STA. 147+75 TO 149+55 LT.
STA. 150+00 TO 154+25 LT.
STA. 151+00 TO 158+30 RT.
STA. 154+60 TO 158+10 LT.
STA. 164+75 TO 174+50 LT.
STA. 166+50 TO 171+10 RT.
STA. 201+25 TO 203+00 RT.
STA. 203+70 TO 205+50 RT.
STA. 205+25 TO 207+30 LT.
STA. 206+25 TO 207+50 RT.
STA. 207+75 TO 209+25 LT.
STA. 208+40 TO 209+25 RT.
STA. 215+25 TO 221+25 RT.
STA. 215+25 TO 223+25 LT.
STA. 223+40 TO 230+00 LT.
STA. 224+50 TO 226+30 RT.
STA. 230+25 TO 233+80 LT.
STA. 233+80 TO 235+80 LT.
STA. 236+10 TO 237+60 LT.

## DITCHING

STA. 84+20 TO 87+00 RT. 400'
STA. 88+50 TO 89+40 LT. 290'
STA. 87+75 TO 93+00 RT. 530'
STA. 90+35 TO 91+50 LT. 120'
STA. 94+25 TO 106+00 LT. 1,175'
STA. 95+40 TO 96+50 RT. 105'
STA. 98+80 TO 100+50 RT. 370'
STA. 109+50 TO 111+20 LT. 175'
STA. 111+50 TO 114+50 LT. 295'
STA. 111+50 TO 112+75 RT. 150'
STA. 115+90 TO 117+25 RT. 135'
STA. 116+90 TO 123+40 LT. 650'
STA. 123+70 TO 125+80 LT. 210'
STA. 127+50 TO 129+50 RT. 200'
STA. 130+00 TO 133+40 RT. 350'
STA. 134+75 TO 138+35 LT. 360'
STA. 138+70 TO 143+00 LT. 430'
STA. 144+30 TO 144+60 RT. 30'
STA. 145+25 TO 148+25 RT. 360'
STA. 147+00 TO 148+50 LT. 260'
STA. 150+00 TO 154+25 LT. 425'
STA. 150+30 TO 150+60 RT. 30'
STA. 151+00 TO 158+30 RT. 730'
STA. 154+60 TO 158+10 LT. 350'
STA. 158+40 TO 174+50 LT. 1,610'
STA. 160+20 TO 162+25 RT. 205'
STA. 162+80 TO 166+30 RT. 345'
STA. 166+65 TO 171+00 RT. 445'
STA. 188+00 TO 191+35 RT. 370'
STA. 1+45 TO 2+80 RT. ("N" SPUR) 210'
STA. 192+25 TO 194+50 LT. 225'
STA. 193+50 RT. TO 2+55 LT.("N" SPUR) 130'
STA. 201+50 TO 203+00 RT. 150'
STA. 203+70 TO 205+50 RT. 180'
STA. 205+25 TO 207+30 LT. 205'
STA. 206+25 TO 207+50 RT. 125'
STA. 207+75 TO 223+15 LT. 1,540'
STA. 208+40 TO 221+25 RT. 1,285'
STA. 223+50 TO 230+00 LT. 650'
STA. 224+50 TO 226+30 RT. 130'
STA. 230+25 TO 233+55 LT. 330'
STA. 233+85 TO 235+75 LT. 195'
STA. 236+10 TO 237+50 LT. 145'
STA. 241+50 TO 242+10 LT. 100'

## REMOVE BROKEN LEDGE FROM DITCH

STA. 210±00 TO 211±00 LT.

## OVERLAY SIDEWALK

STA. 22+47 (RT.) TO 0±41 (RT.) - MEADOW ST.
STA. 23±09 TO 23+70 RT.
STA. 24+04 TO 24+71 RT.
STA. 25+25 TO 25+66 RT.
STA. 26+00 TO 26+96 RT.
STA. 27+30 TO 27+35 RT.
STA. 27+69 TO 28+83 RT.
STA. 29+17 TO 29+88 RT.

## CONSTRUCT PEDESTRIAN RAMPS

STA. 22+40 TO 22+47 RT.
STA. 0±41 (RT.) TO 0±48 (RT.) - MEADOW ST.
STA. 23±07 TO 23±09 RT.
STA. 23+70 TO 23+77 RT.
STA. 23+97 TO 24+04 RT.
STA. 24+71 TO 24+78 RT.
STA. 25+18 TO 25+25 RT.
STA. 25+66 TO 25+73 RT.
STA. 25+93 TO 26+00 RT.
STA. 26+96 TO 27+03 RT.
STA. 27+29 TO 27+30 RT.
STA. 27+35 TO 27+42 RT.
STA. 27+62 TO 27+69 RT.
STA. 28+83 TO 28+90 RT.
STA. 29+10 TO 29+17 RT.
STA. 29+88 TO 29+95 RT.

## CONSTRUCT PAVED ENTRANCE WITH 4 INCH H.B.P.

STA. 65±40 RT. - 40' WIDE TAPER TO 24' WIDE FOR 15 L.F.
STA. 75±75 RT. - 36' WIDE TAPER TO 20' WIDE FOR 15 L.F.

## REPLACE EXISTING DOWNSPOUTS AS NECESSARY

- ALONG GUARDRAIL CURB SECTION LT. AND RT.

## PLAIN RIPRAP DOWNSPOUT

| | | | |
|---|---|---|---|
| STA. 40±25, 50'± | RT. | 6' WIDE | 20' LONG |
| STA. 48±25 | RT. | 6' WIDE | 25' LONG |
| STA. 129+75 | LT. | 10' WIDE | 45' LONG |
| STA. 134±55 | LT. | 10' WIDE | 50' LONG |
| STA. 138±50 | LT. | 10' WIDE | 35' LONG |

## STA. 24+25 TO STA. 24+50 RT.

- WIDEN SIDEWALK AROUND POLE AND GUYWIRE

## STA. 34+00 ±115' RT.

- EXTEND CULVERT OUTLET WITH 15"X8' C.M.P.
- RIPRAP OUTLET AND DITCH AHEAD TO EXISTING 24" R.C.P.

## EXCAVATE 30" REPLACE WITH 27" AGGREGATE SUBBASE COURSE - GRAVEL AND PAVE WITH 3" H.B.P. GRADING "B"

| | | |
|---|---|---|
| STA. 132±00 TO 133±50 | RT. | SHOULDER 10' WIDE |
| STA. 243±00 TO 243±75 | RT. | SHOULDER 8' WIDE |
| STA. 245±25 TO 247±25 | LT. | SHOULDER 10' WIDE |
| STA. 245±35 TO 246±75 | RT. | SHOULDER 10' WIDE |

## 12 INCH CORRUGATED METAL PIPE

STA. 98+75 LT. EXTEND OUTLET 6 L.F.
STA. 98+40 LT. " " 4 L.F.

## 15 INCH CORRUGATED METAL PIPE

| STATION | SIDE | DESCRIPTION |
|---|---|---|
| 34±00 | 115'± RT. | EXTEND CULVERT OUTLET WITH 15" X 8' C.M.P. RIPRAP OUTLET AND DITCH AHD. TO EXISTING 24" R.C.P. |
| 98+05 AND 98+65 | RT. | (DRIVEWAY) EXTEND INLET 6 L.F. - EXTEND OUTLET 6 L.F. |
| 100+60 AND 100+40 | RT. | (DRIVEWAY) EXTEND INLET 4 L.F. - EXTEND OUTLET 4 L.F. |
| 119+12, 45' RT. TO 120+06, 48' RT. | | (DRIVEWAY) INSTALL 15" X 94' C.M.P. - REMOVE EXISTING 12" X 32' CULV. |
| 218+06 AND 218+30 | LT. | (DRIVEWAY) EXTEND INLET 6 L.F. - EXTEND OUTLET 4 L.F. |
| 233+75 | LT. | (DRIVEWAY) EXTEND OUTLET 4 L.F. |
| 112+85 AND 112+65 | LT. | (DRIVEWAY) EXTEND INLET & CULVERT 6' L.F. |

## 24 INCH CORRUGATED METAL PIPE

STA. 141±70 LT. (DRIVEWAY)
EXTEND OUTLET 8 L.F.

## REMOVE AND RELAY 18 INCH CONCRETE PIPE

STA. 89+95 LT. RESET PIPE 8 L.F.

108-247

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION NOTES

SHEET OF AUGUSTA, MAINE

REVISED "AS Built" 1994 DB

BRIDGTON – HARRISON ROUTE 117 PROJECT NO. F-STP-019P(17)X

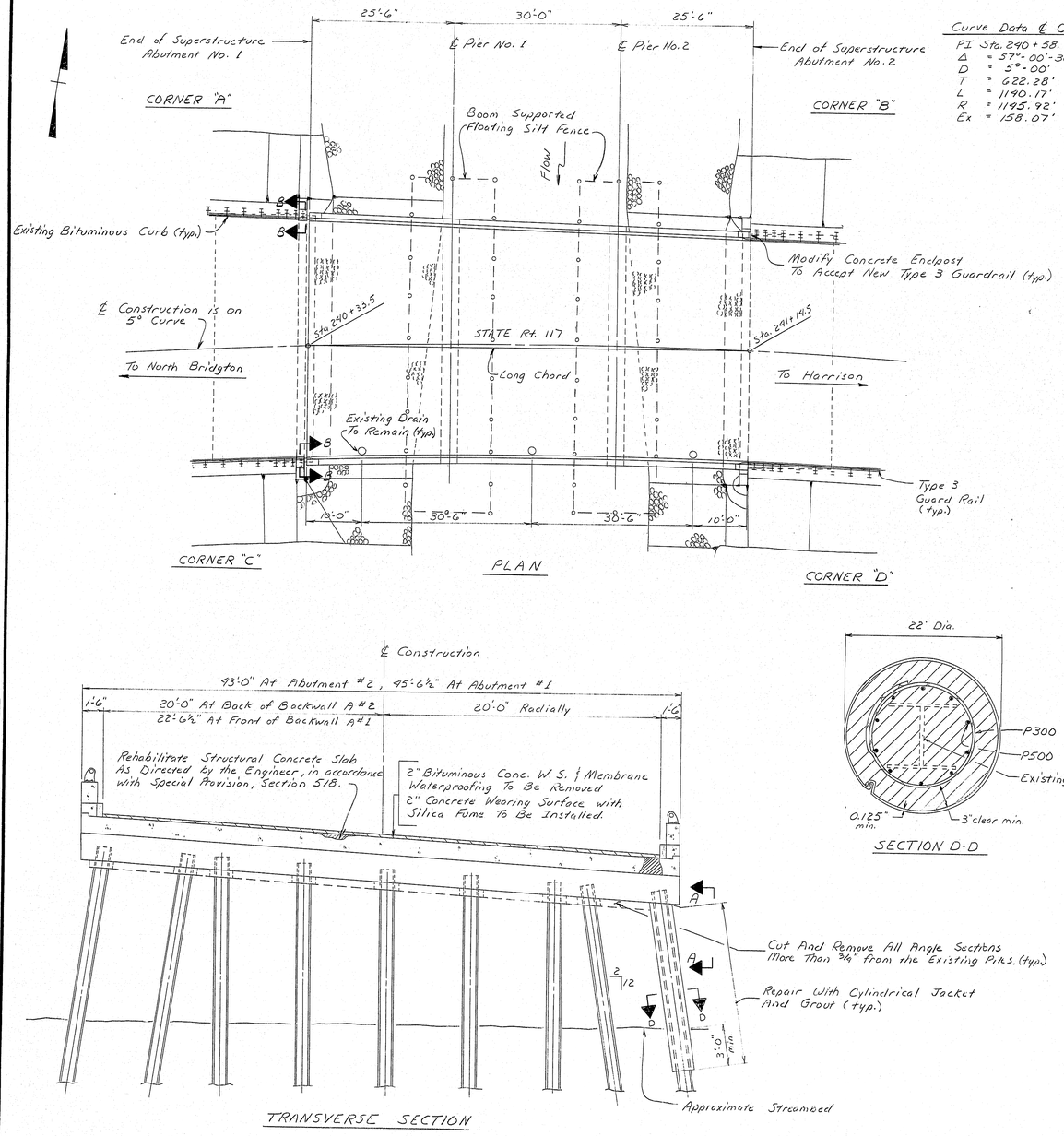
PROJECT ENGINEER
DESIGN-DETAILED BY S. MORRILL DATE 4-94
CHECKED R.V.
REVISIONS
FIELD CHANGES

PLANS

02JUN94-010100

P.in 003316.00

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | F-STP-019P(17)X | 5 | 19 |




| Curve Data ℄ Const. | |
|---|---|
| PI | Sta. 240+58.82 |
| Δ | = 57°-00'-30" Rt |
| D | = 5°-00' |
| T | = 622.28' |
| L | = 1140.17' |
| R | = 1195.92' |
| Ex | = 158.07' |

## SPECIFICATIONS

DESIGN : AASHTO Standard Specifications for Highway Bridges 1992 with Interim Specifications thru 1993.
CONTRACT : State of Maine, Department of Transportation, Standard Specifications, Highways and Bridges, Revision of October 1990.

## DESIGN LOADING

Live Load — — — — — — — — H20

## MATERIAL

Concrete: See Special Provision Section 501 (Pile Repair) And Supplemental Specification Section 518 (Rehabilitation of Bridge Decks)
Reinforcing Steel — — ASTM A615 Grade 60

## BASIC DESIGN STRESSES

Concrete — — — — — — $f'c$ = 3000 psi
Reinforcing Steel — — — — $fy$ = 60,000 psi

## SCOPE OF WORK

1.) Maintain a minimum of one 12 foot lane with a temporary traffic signal during the rehabilitation of the right side. Maintain a minimum of two 11 foot lanes during the rehabilitation of the left side.

2.) Remove the existing bituminous concrete wearing surface and membrane waterproofing.

3.) Rehabilitate structural concrete slab as necessary.

4.) Install new concrete wearing surface with silica fume.

5.) Modify endposts for new guard rail connection.

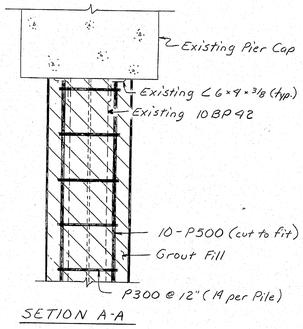
6.) Rehabilitate pile bent piers.

7.) Repair riprap at Abutment #2.

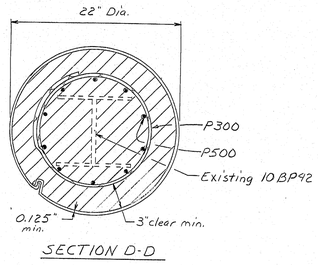
## REINFORCING STEEL SCHEDULE

| BENT BAR | | | |
|---|---|---|---|
| Mark | No. | Length | Description |
| P300 | 252 | 5'-3" | Pile Jacket - Horizontal |
| STRAIGHT BAR | | | |
| P500 | 180 | 16'-0" | Pile Jacket - Vertical |

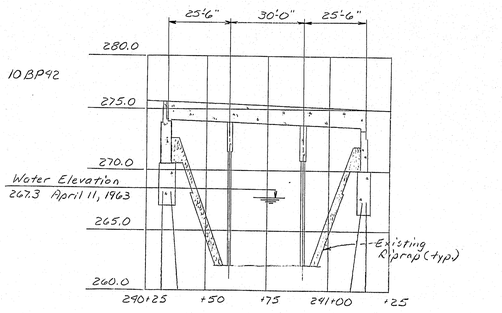
1.) Bending details and hooks shall conform to the recommendations of the current revisions of ACI Standard 318.
2.) Reinforcing Bar : ASTM A615 Grade 60.
3.) All dimensions are out to out of reinforcing steel.




SETION A-A



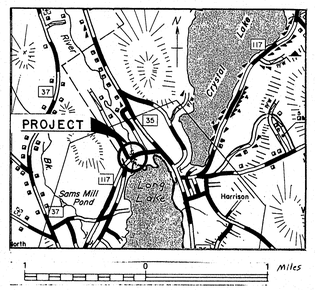

SECTION D-D




PROFILE ALONG ℄ CONSTRUCTION




TRANSVERSE SECTION




LOCATION MAP

| PROJECT DESIGN ENGINEER | | BY | DATE |
|---|---|---|---|
| PLANS | DESIGN - DETAILED | S.E.L. | 6-93 |
| | CHECKED | R.W.N. | 3-94 |
| | REVISIONS - BRIDGE NO. | R.S.B. | 3-94 |
| | FIELD CHANGES | | |

BRUNING 45710-1

108-248

"As Built" 1994 DB Cuttle

Bridge # 6121

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BEAR RIVER BRIDGE

HARRISON

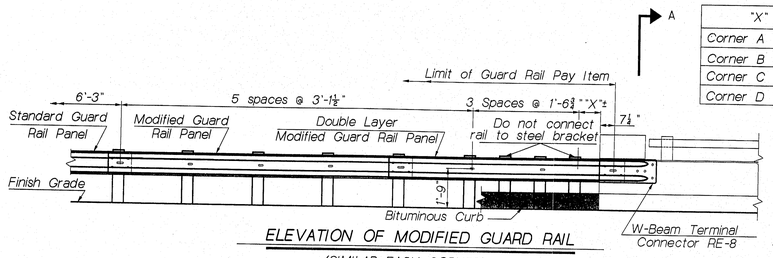
CUMBERLAND COUNTY

BRIDGE PLAN & PIER DETAILS

SHEET 1 OF 2 AUGUSTA, MAINE October, 1993

Pin 003316.00

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 1 | MAINE | F-STP-019P(17)X | 6 | 19 |

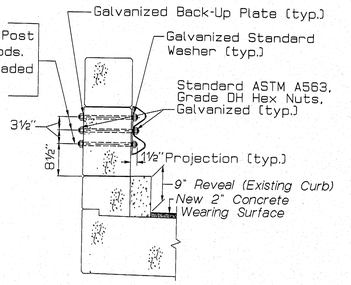



ELEVATION OF MODIFIED GUARD RAIL

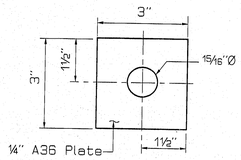
(SIMILAR EACH CORNER)

| "X" DIMENSION | |
|---|---|
| Corner A | 10⅜" |
| Corner B | 1'-4⅜" |
| Corner C | 1'-0⅜" |
| Corner D | 10½" |

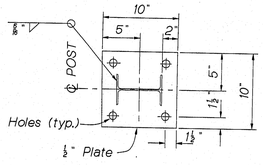
℄ 1"Ø Holes In Concrete End Post For ⅞"Ø X 1'-4" ASTM A449 Rods. Both Rod Ends Must Be Threaded 2¼" Before Galvanizing.




SECTION A-A

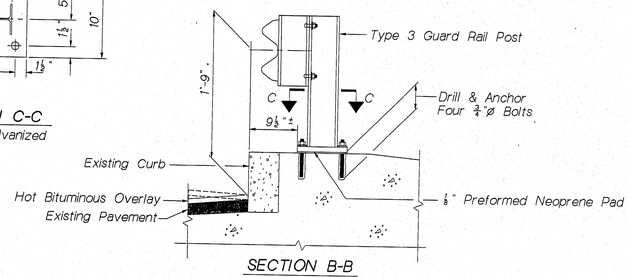



BACK-UP PLATE




SECTION C-C

Hot Dip Galvanized

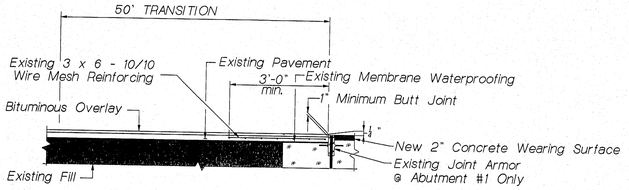



SECTION B-B

(ABUT #1 - 1st Post)

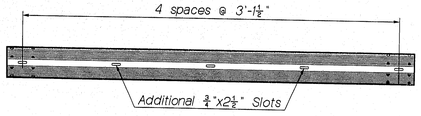
All work and materials necessary to install the two posts at Abutment 1 shall be incidental to related Guard Rail items and shall meet the requirements of the Standard Specifications and the Special Provision to Section 507 for Anchor Bolt Installation.

| GUARDRAIL PAY LIMITS | |
|---|---|
| ABUTMENT #1 | ABUTMENT #2 |
| Sta. 240+39.2, 23.0' Lt. | Sta.241+12.7, 20.4' Lt. |
| Sta. 240+33.4, 20.4' Rt. | Sta.241+14.5, 20.4' Rt. |




PAVEMENT SECTION AT ABUTMENTS

| Radial Offsets From ℄ Construction To Face Of Rail Post | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1st Post | 2nd Post | 3rd Post | 4th Post | 5th Post | 6th Post | 7th Post |
| Corner A | 23'-6⅛" | 23'-11½" | 24'-1" | 24'-2⅛" | 24'-5" | 24'-7⅜" | 24'-10½" |
| Corner B | 21'-9⅛" | 21'-9½" | 21'-9½" | 21'-9⅜" | 21'-10" | 21'-10½" | 21'-11" |
| Corner C | 20'-11⅛" | 21'-3½" | ——— | ——— | ——— | ——— | 21'-3⅜" |
| Corner D | 21'-3" | 21'-3½" | ——— | ——— | ——— | ——— | 21'-3⅜" |

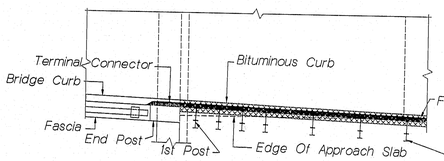



MODIFIED GUARD RAIL PANEL

TEMPORARY TRAFFIC SIGNAL

| CONTROLLER TIMING (Seconds) | | |
|---|---|---|
| Interval | Eastbound | Westbound |
| Initial | 12 | 12 |
| Extension | 4 | 4 |
| Maximum | 16 | 16 |
| Yellow | 3 | 3 |
| All Red | 8 | 8 |

The temporary traffic signal controller shall be a 2-phase fully actuated controller. Vehicle detection shall be placed 150 ft. from the stopline. Initial timing shall be as shown above.




PLAN - CORNER D

(Other Corners Similar)

| LIST OF BRIDGE QUANTITIES | | | |
|---|---|---|---|
| ITEM NO. | DESCRIPTION | QUANTITY | UNIT |
| 202.127 | REMOVING OF EXISTING BITUMINOUS PAVEMENT | 1 | LS |
| 501.35 | PILE REPAIR | 18 | EACH |
| 502.29 | STRUCT. CONC. WEARING SURFACE ON BRIDGES (21 CY) | 1 | LS |
| 502.4711 | SILICA FUME ADDITIVE (824 LBS) | 1 | LS |
| 514.06 | CURING BOX FOR CONCRETE CYLINDERS | 1 | EACH |
| 518.30 | REHAB. OF STRUCT. CONC. SLAB--TO REINFORCING STEEL | 130 | SF |
| 518.31 | REHAB. OF STRUCT. CONC. SLAB--TO BELOW REINFORCING STEEL | 100 | SF |
| 518.32 | REHAB. OF STRUCT. CONC. SLAB--FULL DEPTH | 100 | SF |
| 526.301 | TEMPORARY CONCRETE BARRIER TYPE I | 1 | LS |
| 527.32 | PORTABLE CRASH BARRELS | 12 | EACH |
| 606.1732 | BRIDGE CONNECTION TYPE 2 | 4 | EACH |
| 639.23 | TESTING FACILITIES CONCRETE | 1 | LS |
| 643.72 | TEMPORARY TRAFFIC SIGNAL | 1 | LS |
| 656.64 | BOOM SUPPORTED FLOATING SILT FENCE | 300 | LF |

A Bridge Deck Evaluation report of the existing bridge is available for the Contractor's reference at the Bridge Design Office in Augusta. The report contains visual inspection information and deck core data of the bridge. There is no assurance that the information or data is a true representation of the conditions of the entire deck.

Plans of existing bridge are available for the Contractor's reference at the Bridge Design Office in Augusta. These are reproductions of original drawings as prepared for the construction of the bridge and it is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.

NOTES

1) Additional holes in the Modified Guard Rail Panel 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.

2) All hardware used to connect the guardrail to the endposts shall be galvanized in accordance with ASTM A153. The Contractor shall carefully coredrill 1 inch diameter holes through the endposts to match the 1 inch holes in the W-Beam Connector. Any resulting damage to either face shall be repaired at the Contractor's expense. After installation is complete, upset threads at both sides of each connection. All labor, materials, and equipment used for the connections will be paid for under Pay Item 606.1732 Bridge Connection Type 2 in accordance with the Special Provision.

3) Reinforcing steel shall have 3 inches cover unless otherwise indicated.

4) The existing Cable Guard Rail shall be removed from the end posts in such a manner so as not to damage the concrete. Any damage shall be repaired at the Contractor's expense. Payment to be incidental to related Guard Rail Items.

5) The first seven Guard Rail Posts at Corners A, C and D shall have (1) 10" Offset Bracket and be 7' in length except for the first Guard Rail Post at Corners A and ◥ which shall be mounted on the backwall and have (1) 6" Offset Bracket.(See Section B-B). The first seven Guard Rail Posts at Corner B shall have (1) 10" and (1) 6" Offset Bracket each and be 7' in length. The Offset Brackets and Guard Rail Posts shall meet the requirements of Section 606 of the Standard Specifications.

6) The Contractor's operations shall be conducted such that traffic will not travel on an unsurfaced concrete deck at any time. Existing bituminous pavement shall be removed and the new concrete wearing surface shall be placed to facilitate this requirement.

7) The original plans indicate curb to curb wire mesh reinforcement in the bituminous pavement extending back a minimum of 3 feet from the front of both backwalls. The intended location was 1½ inches below the original pavement surface. The Contractor shall use caution in removing pavement in the vicinity of both abutments. Any damages or injuries resulting from encountering the pavement reinforcing shall be the sole responsibility of the Contractor.

108-249

| PROJECT DESIGN ENGINEER | BY | DATE |
|---|---|---|
| DESIGN-DETAILED | S. Lebrun | 5-92 |
| CHECKED | R.L. Menard | 6-92 |
| REVISIONS | | |
| FIELD CHANGES | | |

PLANS

05JUN94-0100.50

DETAIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BEAR RIVER BRIDGE
OVER
BEAR RIVER
IN THE TOWN OF
HARRISON
CUMBERLAND COUNTY

BRIDGE DETAILS & NOTES

SHEET 2 OF 2 AUGUSTA, MAINE October, 1993

As Built 1994 DBCurtis