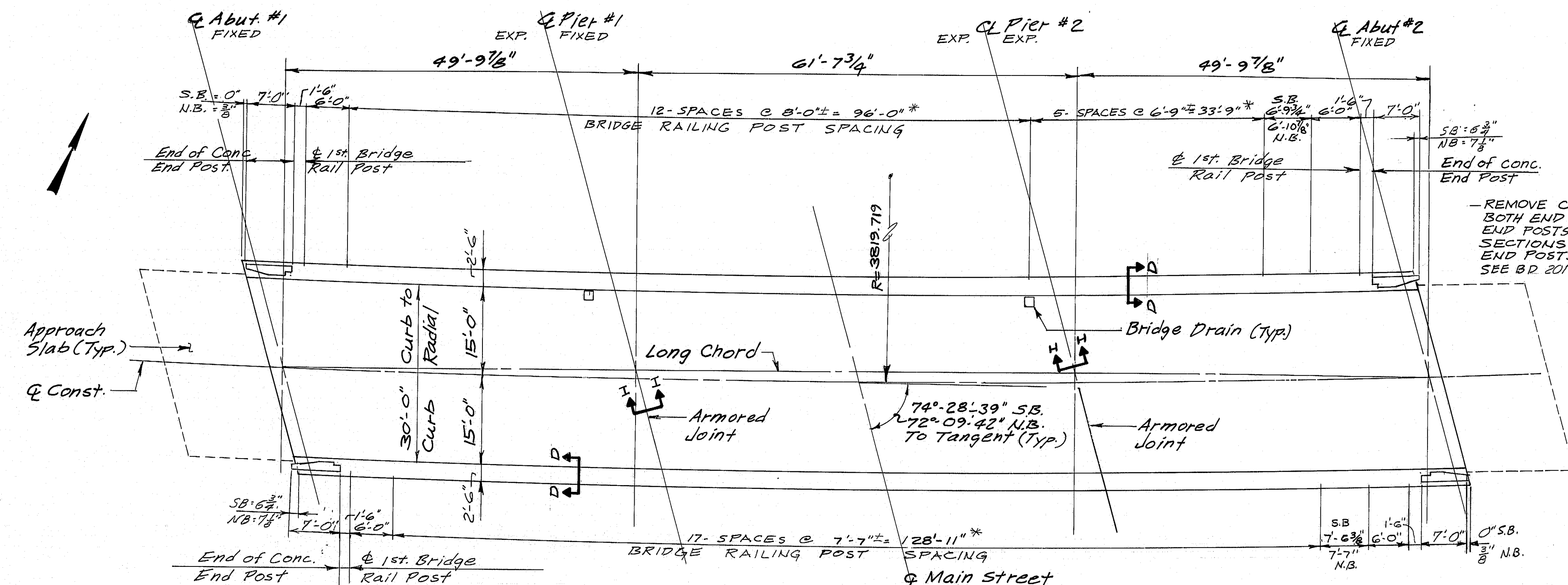


F.R.M.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IR-95-6(62)19	23	36



I-95 SOUTHBOUND AND NORTHBOUND OVER MAIN STREET 5818NB  
1457SB

- CONSTRUCTION NOTES**
1. MAINTAIN ONE 12-FOOT MINIMUM TRAFFIC LANE AT ALL TIMES.
  2. ALL WORK SHALL BE DONE BEHIND TEMPORARY CONCRETE BARRIERS.
  3. THE TOP SURFACE OF THE EXISTING CONCRETE SLABS SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER.
  4. DEPRESS THE BITUMINOUS WEARING SURFACE AROUND THE EXISTING BRIDGE DRAINS AS DIRECTED BY THE ENGINEER.
  5. BECAUSE OF STAGED CONSTRUCTION, SOME EXPANSION JOINTS MAY REQUIRE CONSTRUCTION JOINTS. THESE SHALL BE AS APPROVED BY THE ENGINEER AS TO TYPE AND LOCATIONS.
  6. PAYMENT FOR DRILLING AND GROUTING ASSOCIATED WITH MODIFICATIONS OF THE JOINTS WILL BE CONSIDERED INCIDENTAL TO THE BRIDGE JOINT MODIFICATION ITEMS.
  7. PAYMENT FOR REMOVING AND RE-INSTALLING BRIDGE RAIL OR GUARDRAIL, AS NEEDED TO ACCOMPLISH JOINT MODIFICATIONS, WILL BE CONSIDERED INCIDENTAL TO THE BRIDGE JOINT MODIFICATION ITEMS.
  8. REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 2 INCHES UNLESS NOTED OTHERWISE.
  9. WHERE GRANITE CURB IS CALLED FOR TO BE REMOVED TO MODIFY A JOINT OR TO INSTALL A SEAL, ONLY THE SMALLEST AMOUNT NECESSARY TO ACCOMPLISH THE WORK SHALL BE REMOVED. IT IS PREFERABLE TO REMOVE CURB TO AN EXISTING JOINT, BUT IF A JOINT IS MORE THAN 3 FEET AWAY THE CURB SHALL BE SAW CUT IN THE FIELD. THE DECISION ABOUT WHETHER TO CUT OR NOT, AND WHERE, SHALL BE THE ENGINEER'S.
  10. REMOVAL OF EXISTING END POSTS SHALL BE CONSIDERED INCIDENTAL TO ITEM 202-125, REMOVAL OF EXISTING CONCRETE CURBS.
  11. THE REMOVAL OF THE EXISTING BITUMINOUS PAVEMENT ON THE APPROACHES SHALL BE CONSIDERED INCIDENTAL TO ITEM 202-127.
  12. CONCRETE END POSTS SHALL BE CONSIDERED INCIDENTAL TO ITEM 507-092, ALUMINUM BRIDGE RAIL, 2-BAR.
  13. Payment for drilling & grouting shall be made under Item 503.13, Reinforcing Steel, Placing.

**SCOPE OF WORK**

- ALL BRIDGES:**
- REMOVE 2 1/2-INCH BITUMINOUS WEARING SURFACE AND REMOVE EXISTING MEMBRANE WATERPROOFING.
  - REMOVE EXISTING END POSTS.
  - REMOVE EXISTING PARAPET SECTION.
  - REMOVE EXISTING CONCRETE CURB (WEBB ROAD BRIDGES ONLY).
  - REPAIR DECK AS NECESSARY.
  - MODIFY AND SEAL EXPANSION JOINTS.
  - INSTALL NEW END POSTS.
  - INSTALL NEW CONCRETE AND GRANITE CURB (WEBB ROAD BRIDGES ONLY).
  - INSTALL NEW BRIDGE RAIL.
  - INSTALL MEMBRANE WATERPROOFING AND 3-INCH BITUMINOUS WEARING SURFACE.
  - CLEAN AND PAINT ALL STRUCTURAL STEEL.
  - MODIFY APPROACH PAVEMENT FOR NEW GRADES.
  - INSTALL GUARDRAIL TRANSITIONS.
  - Modify Approach Pavement for new grades where required.
- REMOVE EXISTING CURB & RAIL**  
INSTALL NEW CURB, RAIL, & END POSTS  
TYPICAL BOTH SIDES
- SEE BD 201-89 FOR CONCRETE END POSTS.

**LEGEND**

- EXISTING CONCRETE TO REMAIN
- EXISTING CONCRETE OR CURB TO BE REMOVED OR REBUILT
- EXISTING GRANITE TO REMAIN

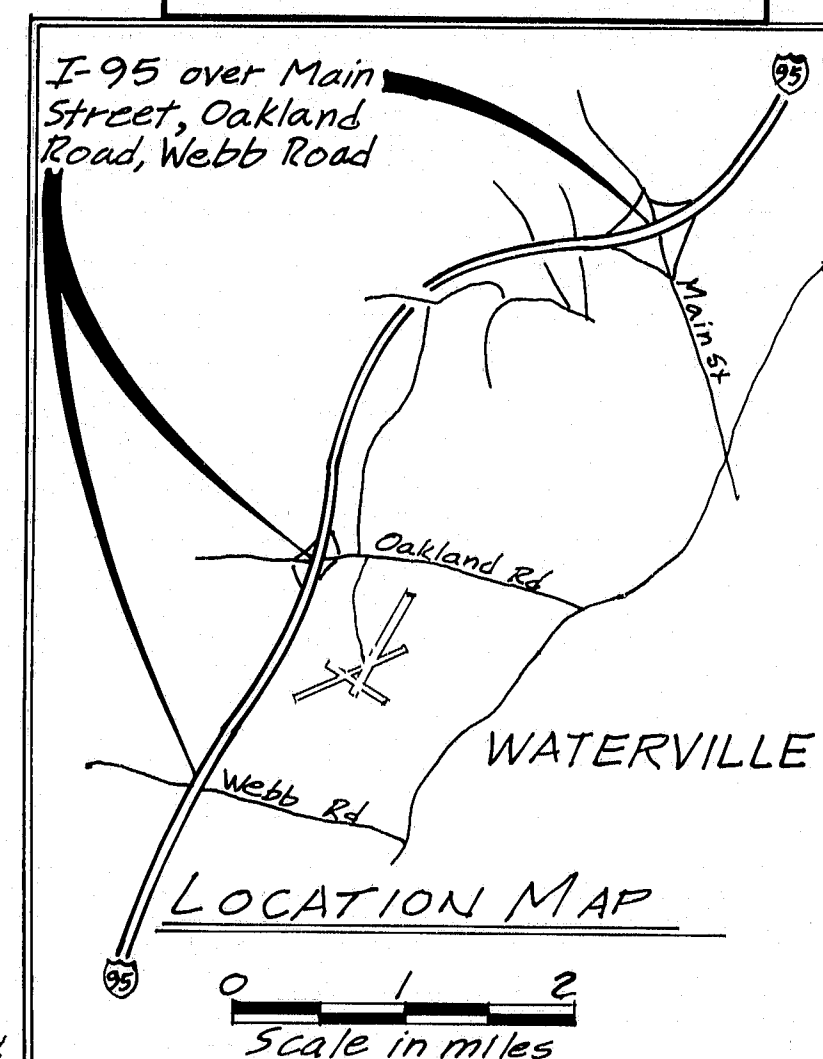
**INDEX OF BRIDGE SHEETS**

1. General Plan - I-95 N.B. & S.B. over Main St & Webb Rd.
2. General Plan - I-95 N.B. & S.B. over Oakland Rd.
3. Sections
4. Joint Details
5. Deck Details
6. Estimated Quantities & Reinforcing Steel Schedule
7. BRIDGE STANDARDS
8. BD 201-89 Concrete End Post
9. BD 301-89 Expansion Device, Compression Seal
10. BD 302-89 Expansion Device, Gland Seal
11. BD 401-89 Aluminum Bridge Railing 2-bar
12. BD 521-89 Superstructure Details

105-38

95-6(62) Waterville

CARROLL E. TAYLOR & ASSOCIATES  
CONSULTING ENGINEERS  
410 SUMMER STREET  
AUBURN MAINE



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

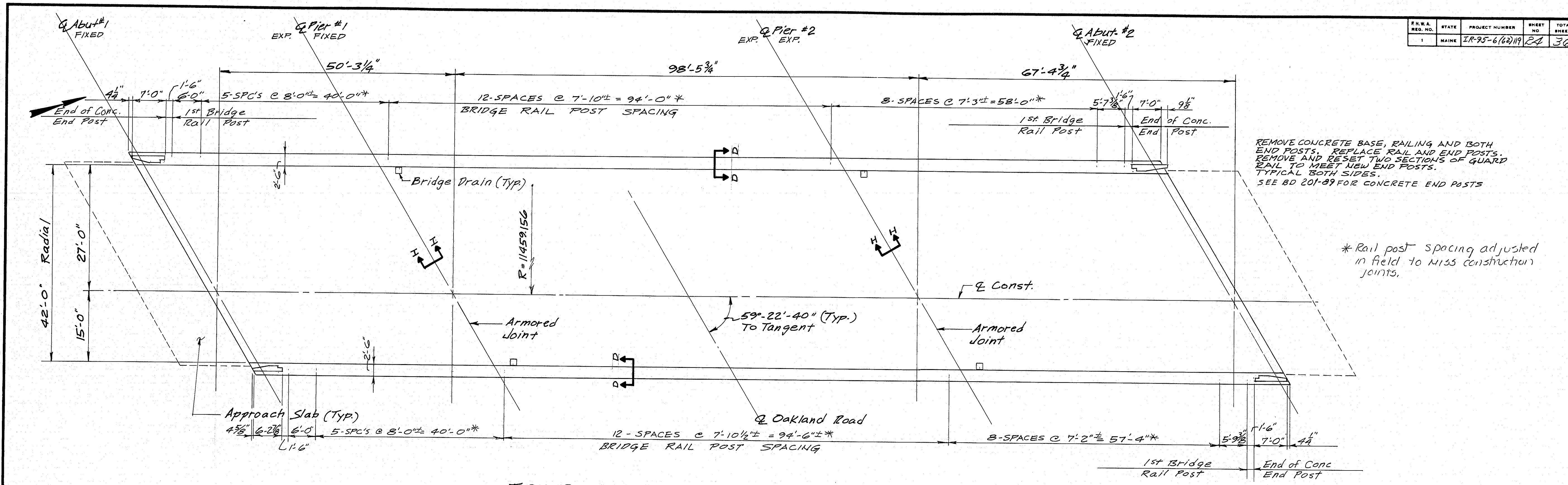
INTERSTATE 95  
SOUTHBOUND AND NORTHBOUND  
OVER  
Main Street, Oakland Road  
Webb Road  
WATERVILLE  
GENERAL PLAN

SHEET 1 OF 11 AUGUSTA, MAINE

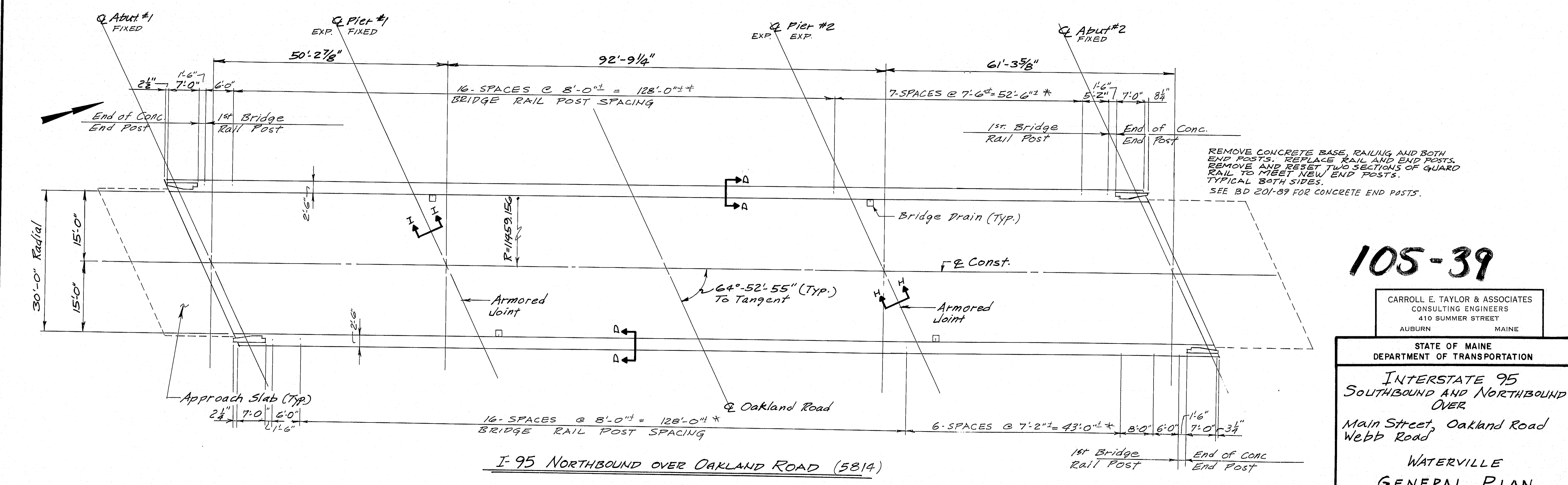
PROJECT DESIGN ENGINEER	DATE
BY: D.C.J.	
CHECKED: B.C.H.	
REVISIONS:	
FIELD CHANGES:	

BRIDGE 44-132-457(1)

F.H.R.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IR-95-6(62)11	24	36



I-95 SOUTHBOUND OVER OAKLAND ROAD (1460)



I-95 NORTHBOUND OVER OAKLAND ROAD (5814)

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CARROLL E. TAYLOR & ASSOCIATES  
CONSULTING ENGINEERS  
410 SUMMER STREET  
AUBURN MAINE

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
INTERSTATE 95  
SOUTHBOUND AND NORTHBOUND  
OVER  
Main Street, Oakland Road  
Webb Road  
WATERVILLE  
GENERAL PLAN  
SHEET 2 OF 11 AUGUSTA, MAINE

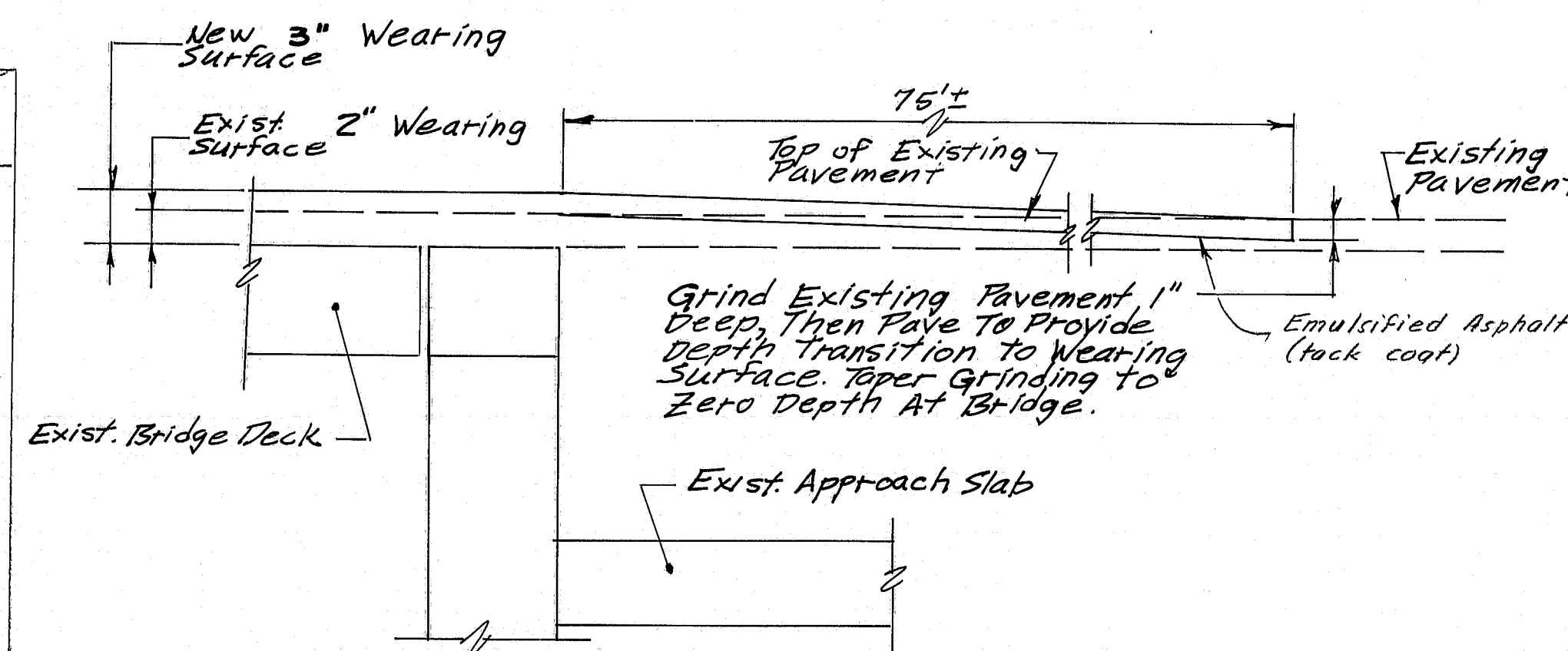
35-6(62) Waterville

PROJECT DESIGN ENGINEER	DATE
BY	
DESIGN DETAIL	
CHECKED	
REVISIONS	
FIELD CHANGES	

BRUNING 44-132-4570-1



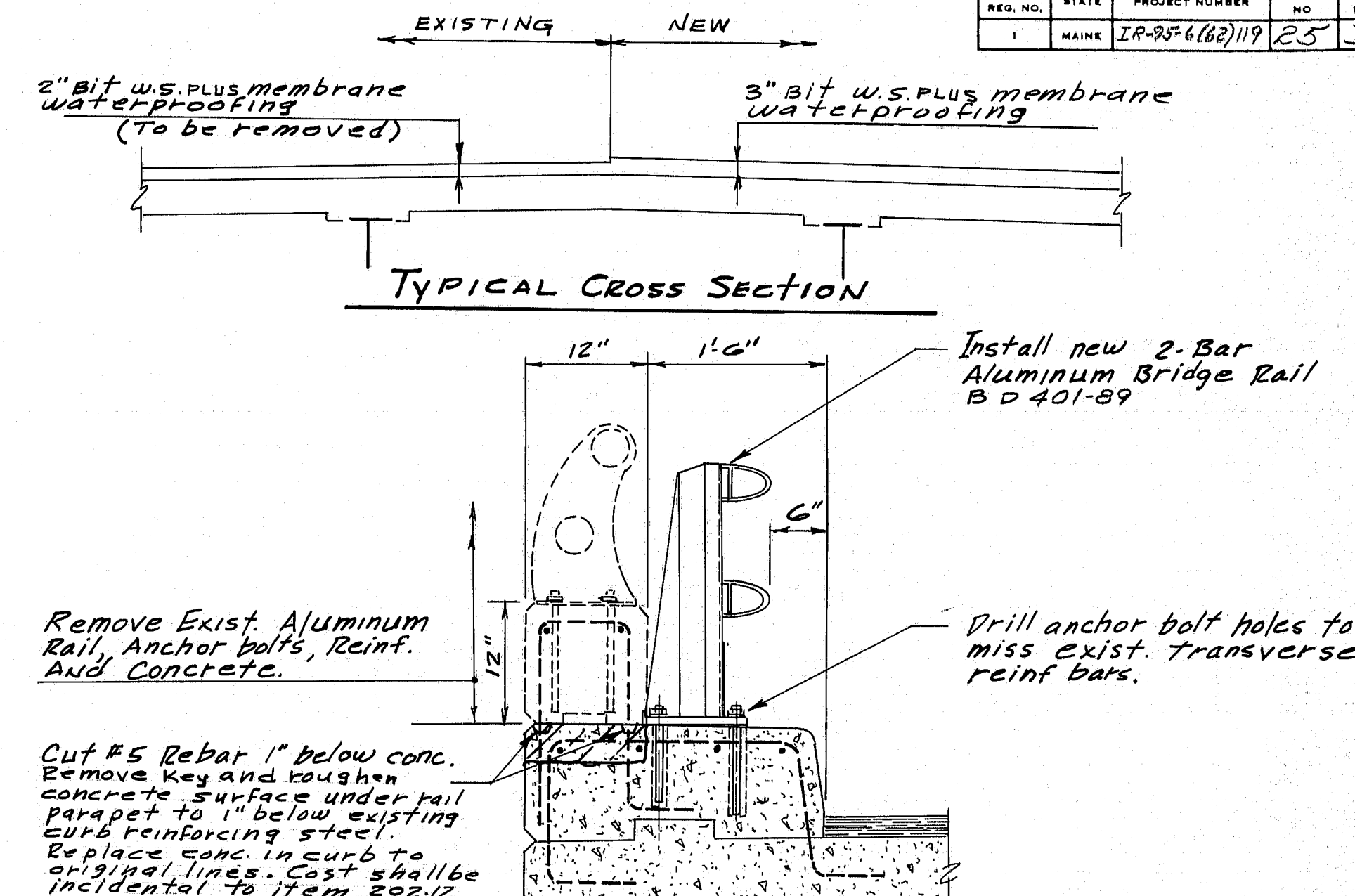
Mark No.	Length	Type	A	B	C	D	E	F	G	H	Location
EP402	80	4'-9"	S	0	2-1	0-7	2-1	0			4 @ each end post
EP403	80	4'-9"	H	0-4 1/2	1-0	1-0	1-0	0-4 1/2	1-0		4 @ each end post
EP404	80	3'-1"	S	0	1-3	0-7	1-3	0			4 @ each end post
EP408	60	4'-3"	S	0	1-10	0-7	1-10	0			3 @ each end post
EP409	40	4'-2"	S	0	1-10	0-6	1-10	0			2 @ each end post
EP410	20	4'-6"	S	0	1-10	0-10	1-10	0			1 @ each end post
EP501	80	5'-3"	V		3-0	2-3					0-4 4 @ each end post
EP502	60	5'-6"	H	0-4 1/2	1-11	0-7	0-7	0-4 1/2	1-11		3 @ each end post
EP503	40	5'-6"	H	0-4 1/2	1-11	0-6	0-6	0-4 1/2	1-11		2 @ each end post
EP504	20	6'-3"	H	0-4 1/2	1-11	0-10		0-4 1/2	1-11		1 @ each end post
C602	584	3'-4"	S		1-2	1-0	1-2				curbs, originally C2
WW506	44	5'-2 1/2"	SJ		1-10	2-0	1-6	0-6			1-2 wing wall modifications



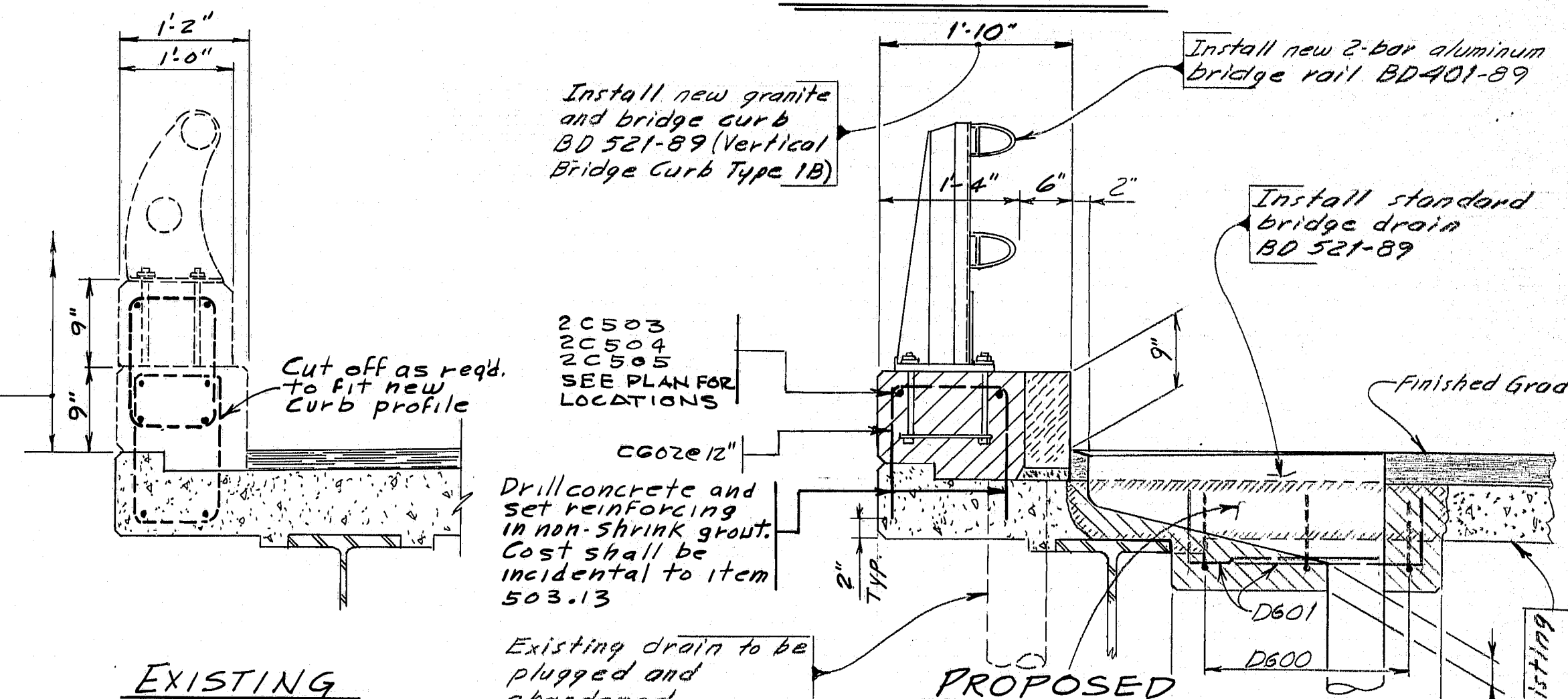
APPROACH PAVEMENT TRANSITION  
Typical all bridges, Each end, except northern end of I-95 over Main St. (Abut. #2)

Mark No.	Length	Location
EP401	160	1'-10" 8 @ each end post*
EP405	80	1'-5" 4 @ each end post
EP508	80	4'-0" 4 @ each end post
C503	32	15'-8" curbs; originally C3
C504	32	14'-11" curbs; originally C4
C505	8	12'-6" curbs; originally C5
WW506	16	10'-1" wingwall modifications

\* Drill and grout into existing concrete curbs.



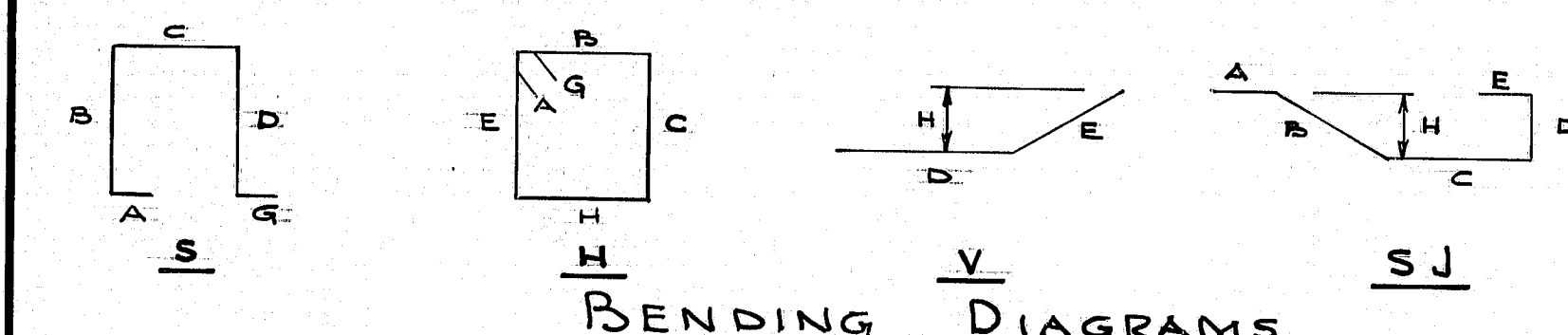
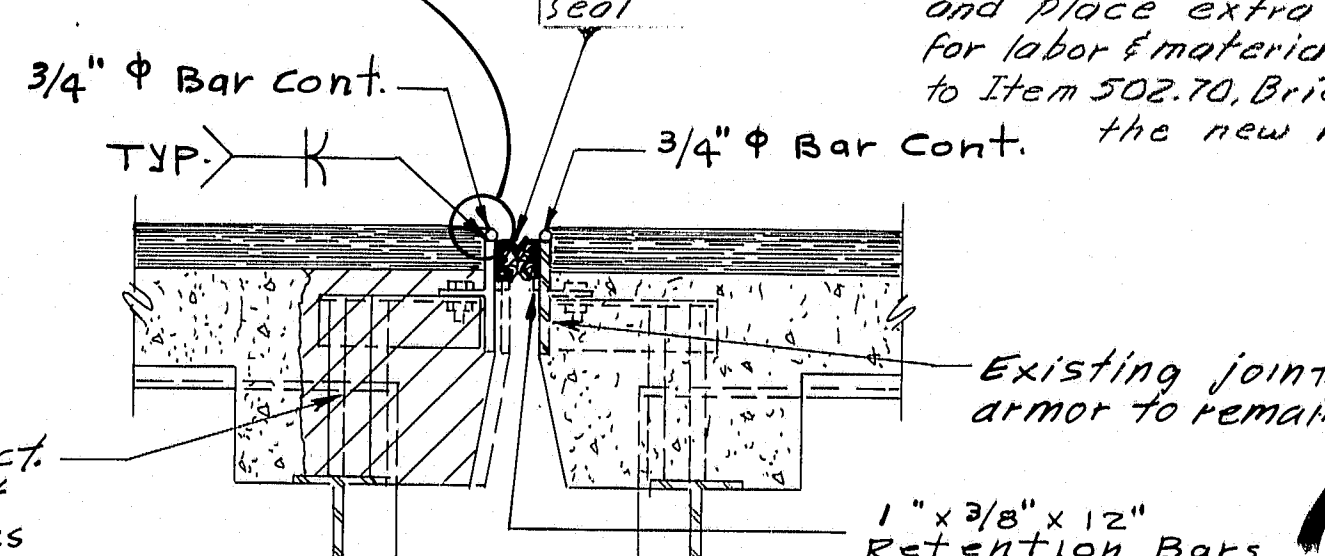
SECTION D-D



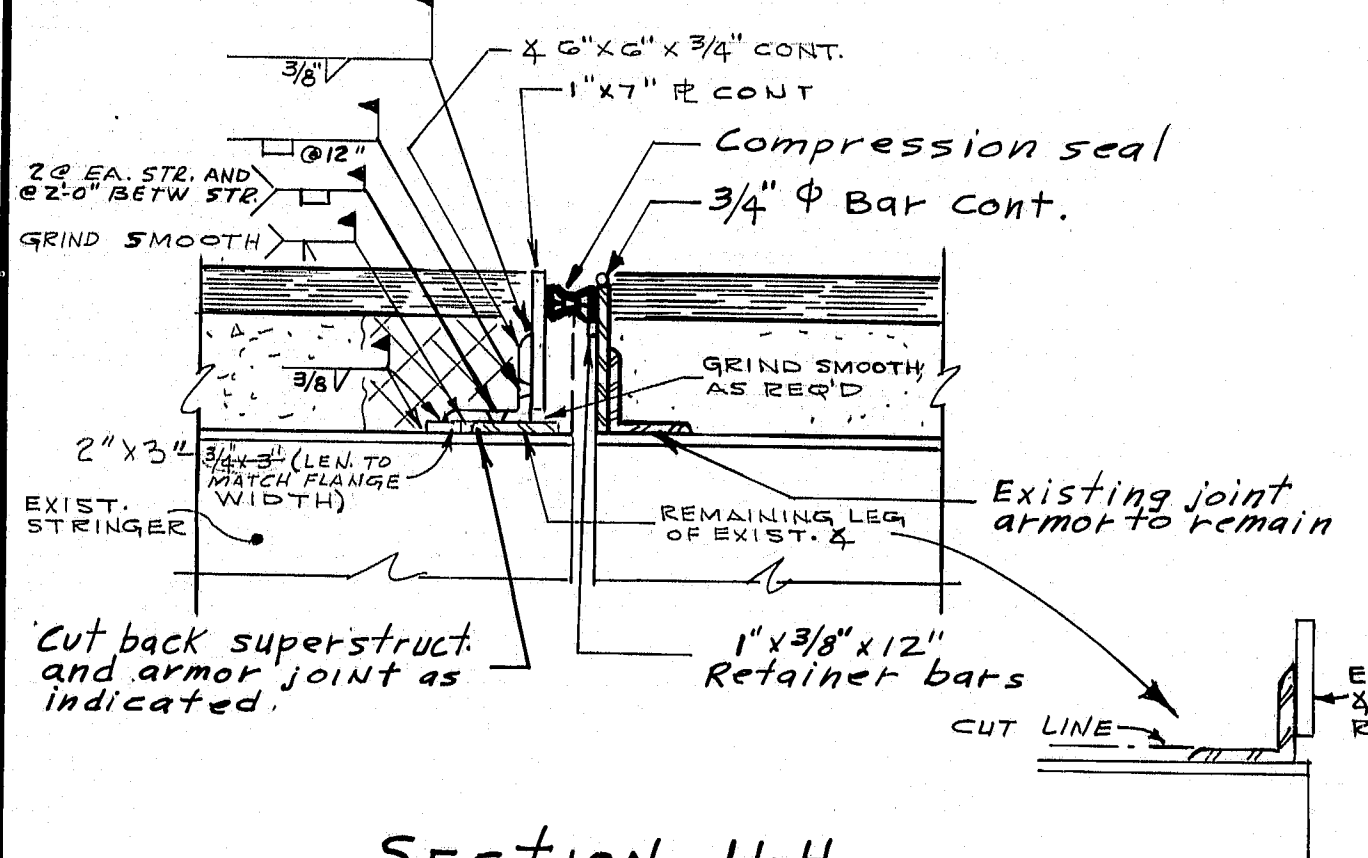
SECTION E-E

Remove existing concrete slab as shown, clean existing re-bars and top of flange. Replace concrete to dimensions shown and place extra re-bars. Payment for labor & material shall be incidental to Item 502.70, Bridge Drains. (Except the new re-bars).

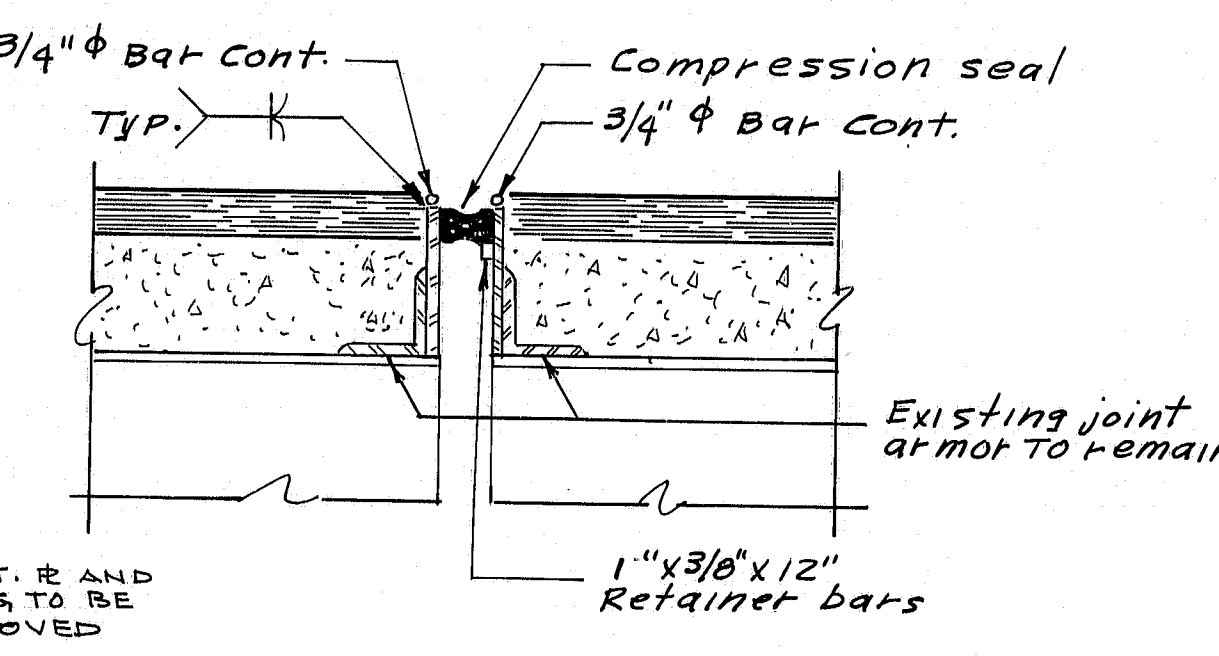
SECTION F-F



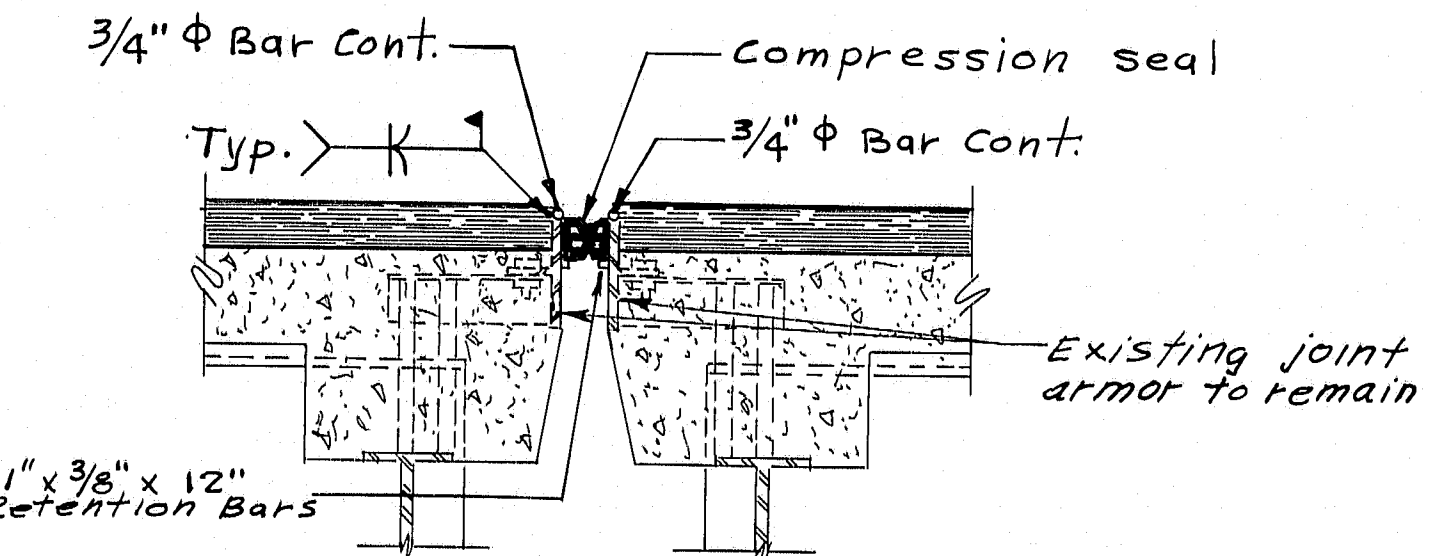
BENDING DIAGRAMS



SECTION H-H



SECTION I-I



SECTION G-G

PROJECT	DESIGN	ENGINEER	DATE
PLANS	DESIGN-DETAILED	BY	DOJ
	CHECKED	DAY	DOJ
	REVISIONS	B.E.H.	
	FIELD CHANGES		

CARROLL E. TAYLOR & ASSOCIATES  
CONSULTING ENGINEERS  
410 SUMMER STREET  
AUBURN MAINE

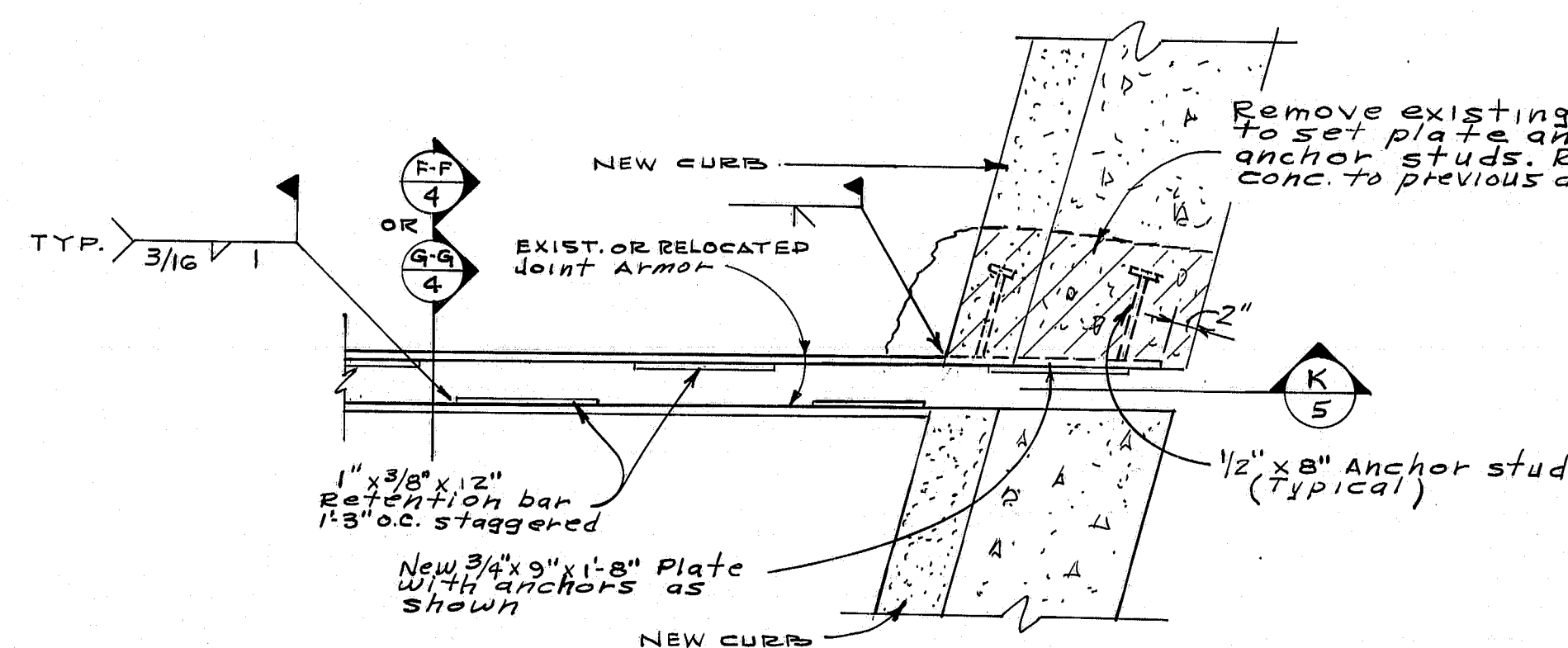
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

INTERSTATE 95  
SOUTHBOUND AND NORTHBOUND OVER  
Main Street, Oakland Road,  
Webb Road

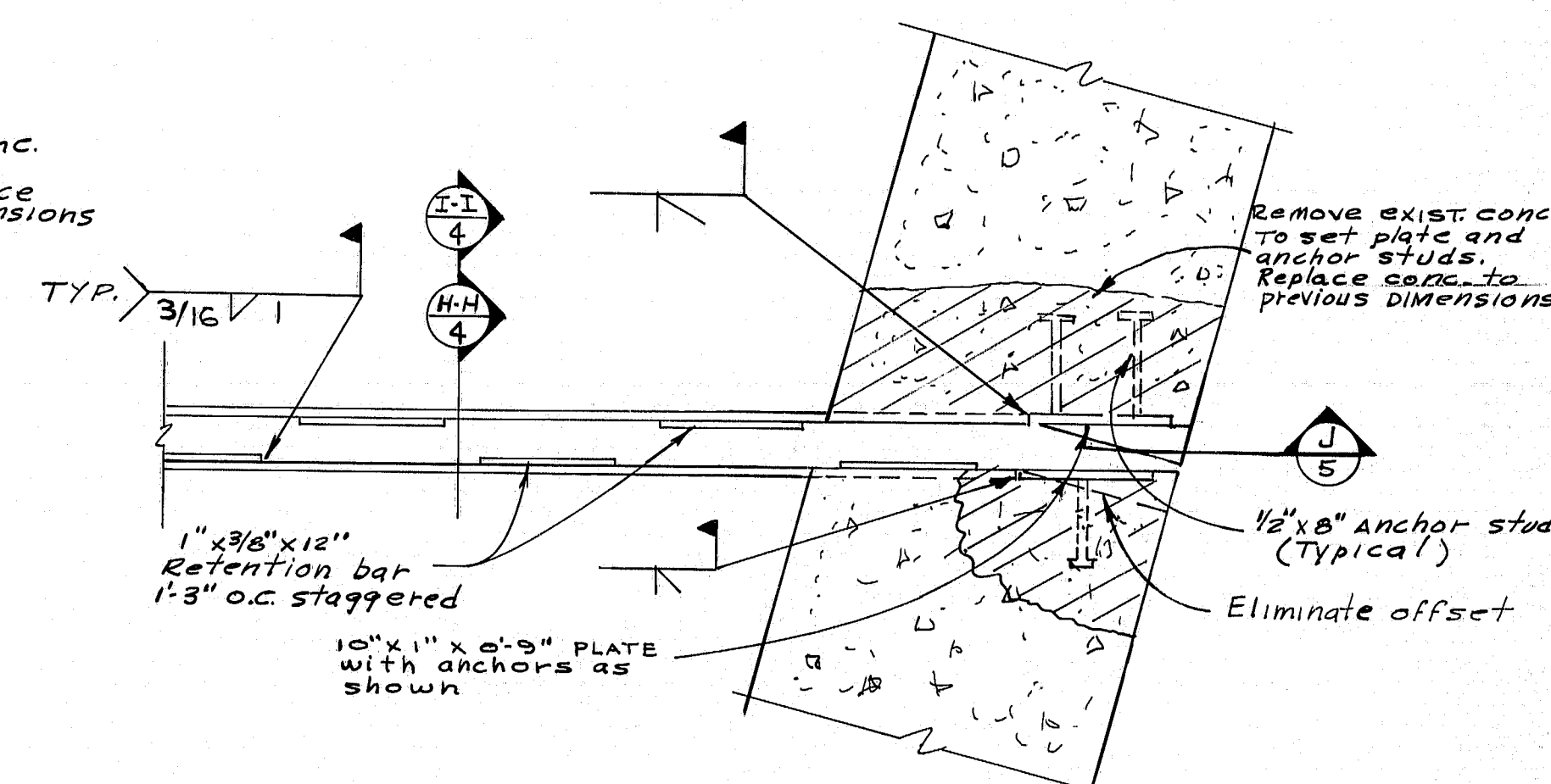
WATERVILLE  
SECTIONS & REINFORCING

SHEET 3 OF 11 AUGUSTA, MAINE

F.R.M.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-6(62)119	26	36



PARTIAL PLAN COMPRESSION SEAL  
(WEBB ROAD)



PARTIAL PLAN - COMPRESSION SEAL  
(MAIN ST. & OAKLAND RD)

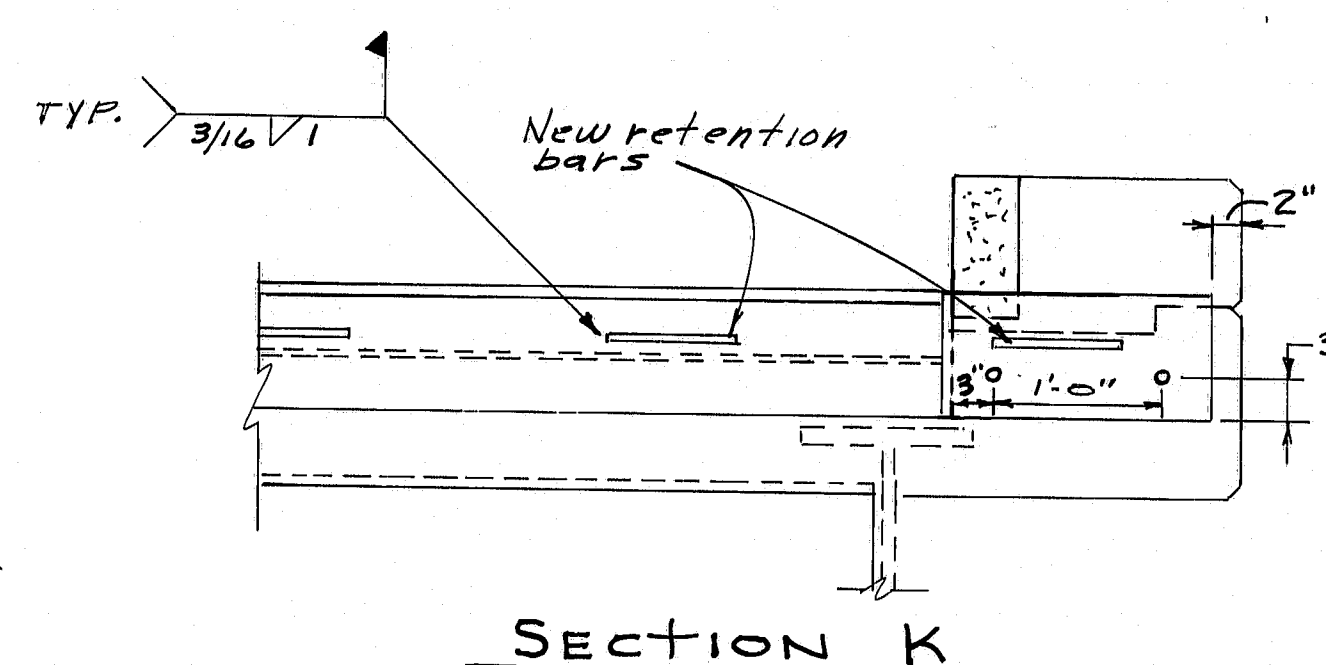
1. SEALS TO BE FURNISHED SHALL HAVE A MOVEMENT RATING OF:

- 2 1/8" - SB/OAKLAND RD. (PIER #2)
- 2" - NB/OAKLAND RD. (PIER #2)
- 1 3/8" - SB/MAIN STREET (PIER #2)
- 1 3/8" - NB/MAIN STREET (PIER #2)
- 1 1/8" - SB/WEBB ROAD (PIER #2)
- 1 1/8" - NB/WEBB ROAD (PIER #2)
- 1 1/8" - SB/OAKLAND RD. (PIER #1)
- 5/8" - NB/OAKLAND RD. (PIER #1)
- 5/8" - SB/MAIN STREET (PIER #1)
- 5/8" - NB/MAIN STREET (PIER #1)
- 5/8" - SB/WEBB ROAD (PIER #1)
- 5/8" - NB/WEBB ROAD (PIER #1)

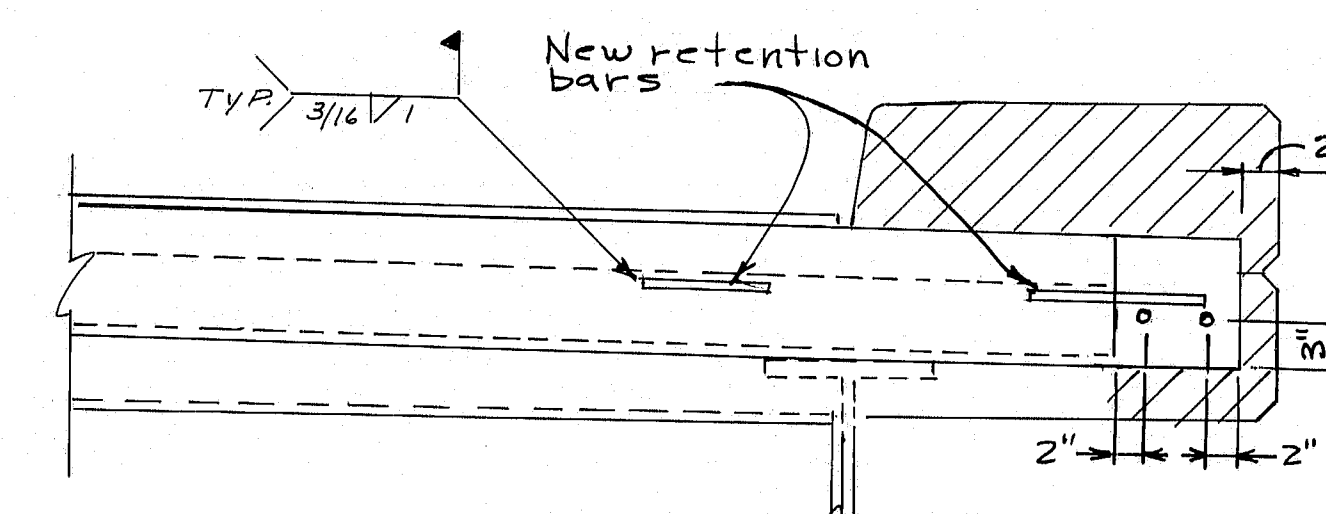
2. SEALS SHALL BE APPROVED BY THE ENGINEER PRIOR TO FABRICATION OF THE JOINT ARMOR.

3. COMPRESSION SEAL JOINT OPENINGS WILL VARY DEPENDING ON THE DIMENSIONS OF THE SEAL SELECTED BY THE CONTRACTOR. THE JOINT OPENING SHALL BE SET ACCORDING TO THE OPENING SHOWN ON THE APPROVED SHOP DETAIL DRAWINGS.

4. THE COMPRESSION SEAL ADJUSTMENT CHART SHOWS THE ADJUSTMENT NECESSARY TO ADJUST THE JOINT OPENING SHOWN ON THE SHOP DETAIL DRAWINGS FOR TEMPERATURES OTHER THAN 45°F. ADJUSTMENT IS TO BE MEASURED PARALLEL TO THE CENTERLINE OF CONSTRUCTION.

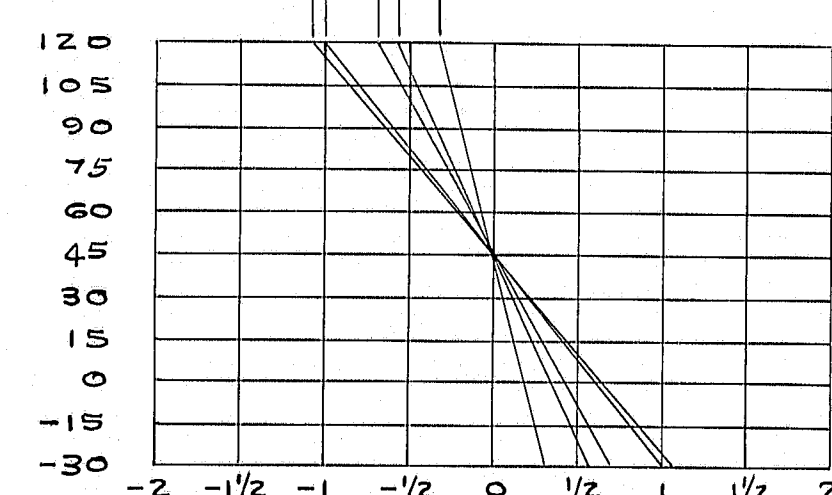


SECTION K

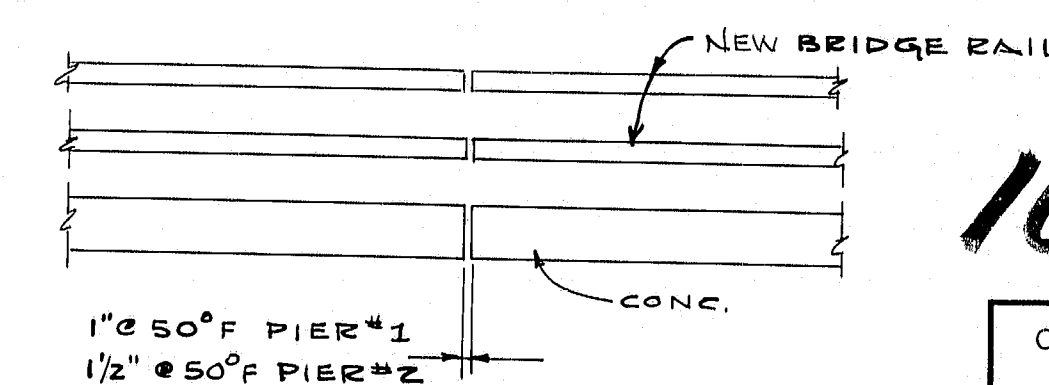
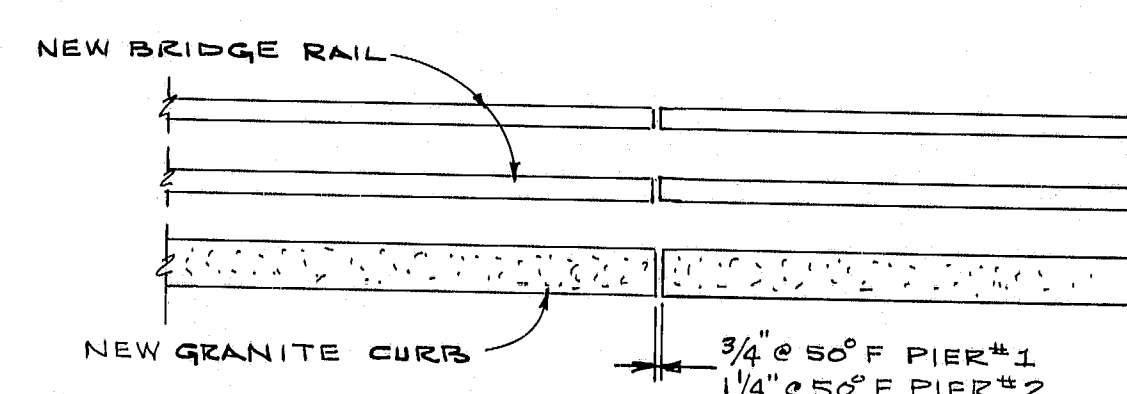


SECTION J

- I-95 N.B. & S.B. OVER MAIN ST. - PIER #2
- I-95 N.B. OVER OAKLAND RD. - PIER #2
- I-95 S.B. OVER OAKLAND RD. - PIER #2
- I-95 N.B. & S.B. OVER WEBB RD. - PIER #2
- I-95 N.B. & S.B. OVER OAKLAND RD. - PIER #1
- I-95 N.B. & S.B. OVER MAIN ST. - PIER #1
- I-95 N.B. & S.B. OVER WEBB RD. - PIER #1



Setting



**105-41**

CARROLL E. TAYLOR & ASSOCIATES  
CONSULTING ENGINEERS  
410 SUMMER STREET  
AUBURN MAINE

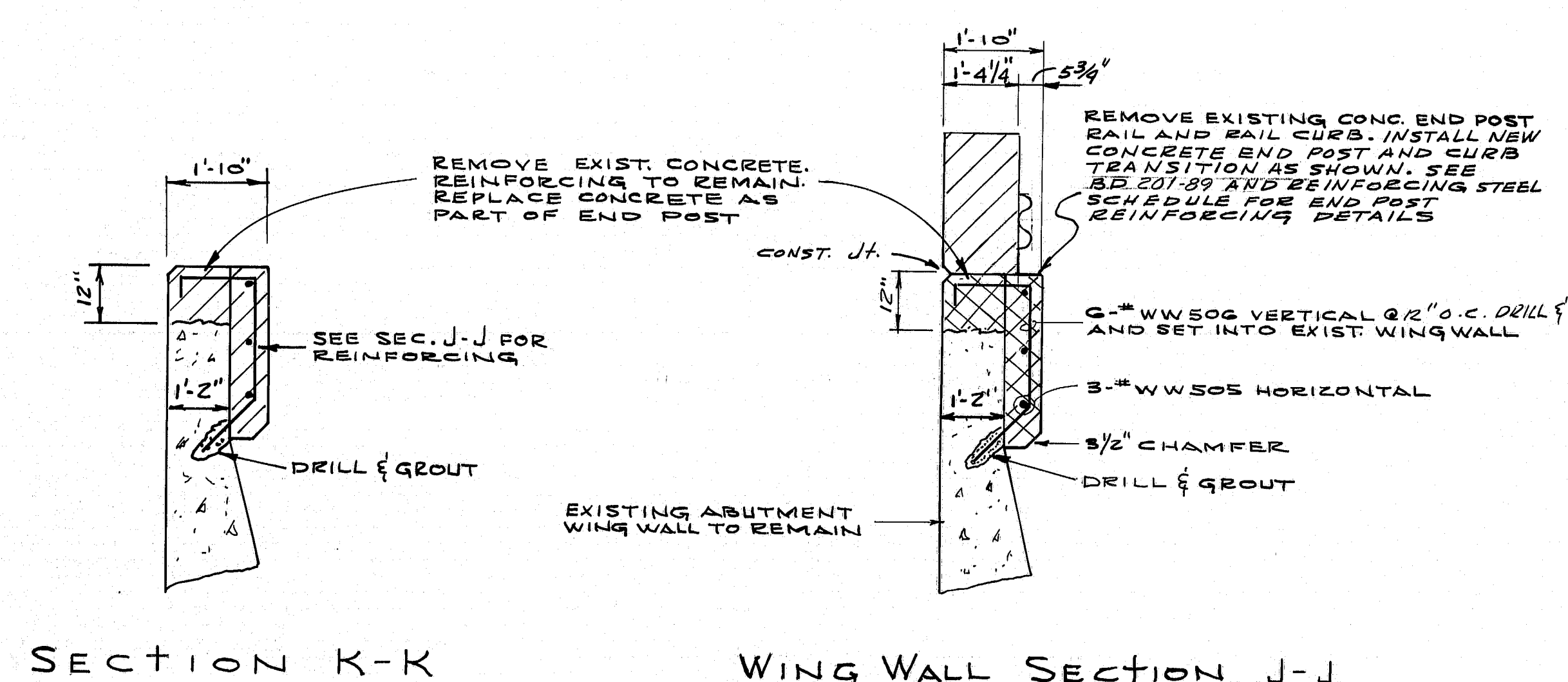
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

WATERVILLE  
JOINT DETAILS

PROJECT DESIGN ENGINEER	DATE
DESIGN - DETAILED	PAV. DOJ.
CHECKED	BCH
REVISIONS	
FIELD CHANGES	
<b>PLANS</b>	



F.R.W.A. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IP-95-6(62)119	27	36

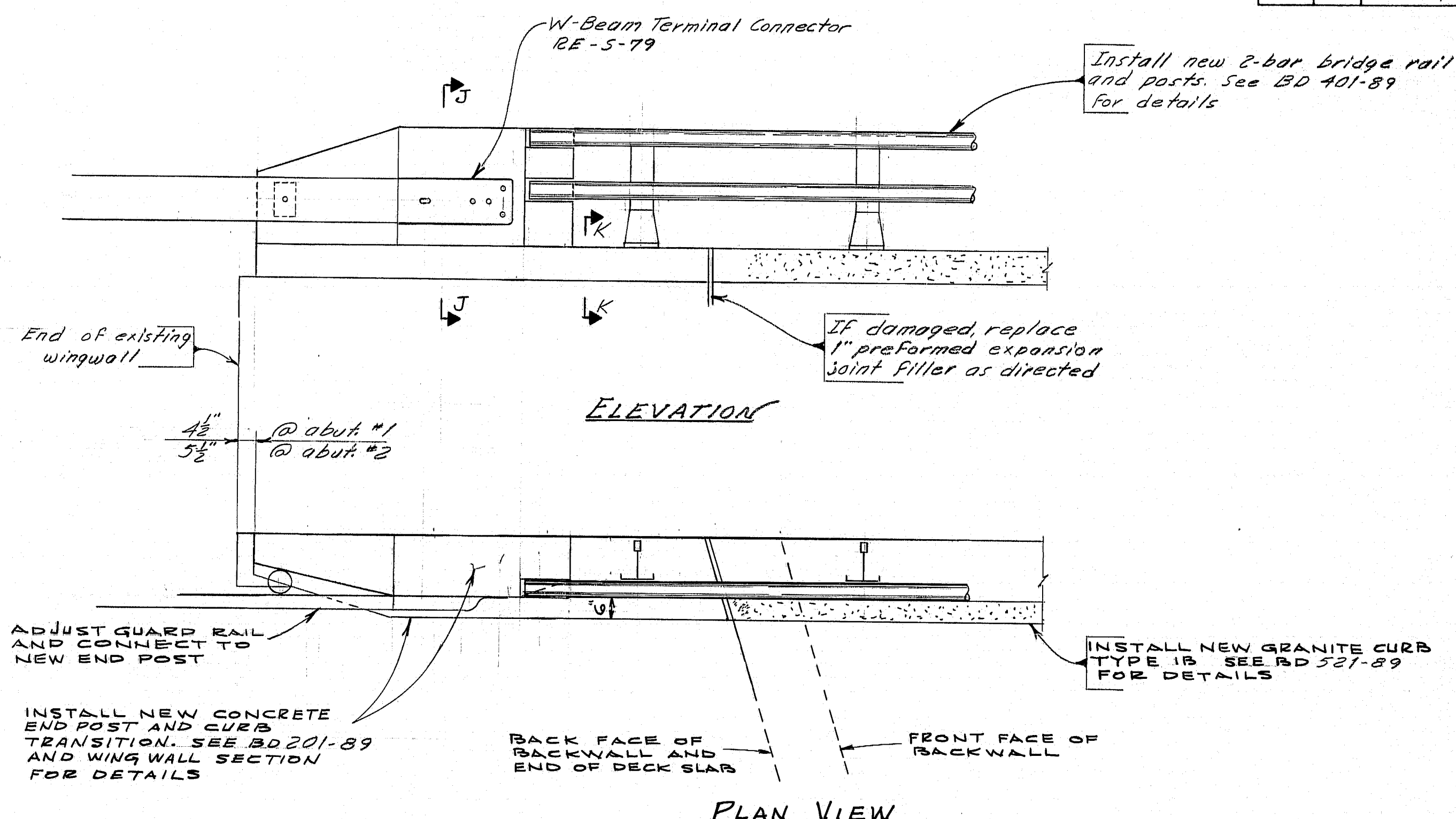


SECTION K-K

WING WALL SECTION J-J

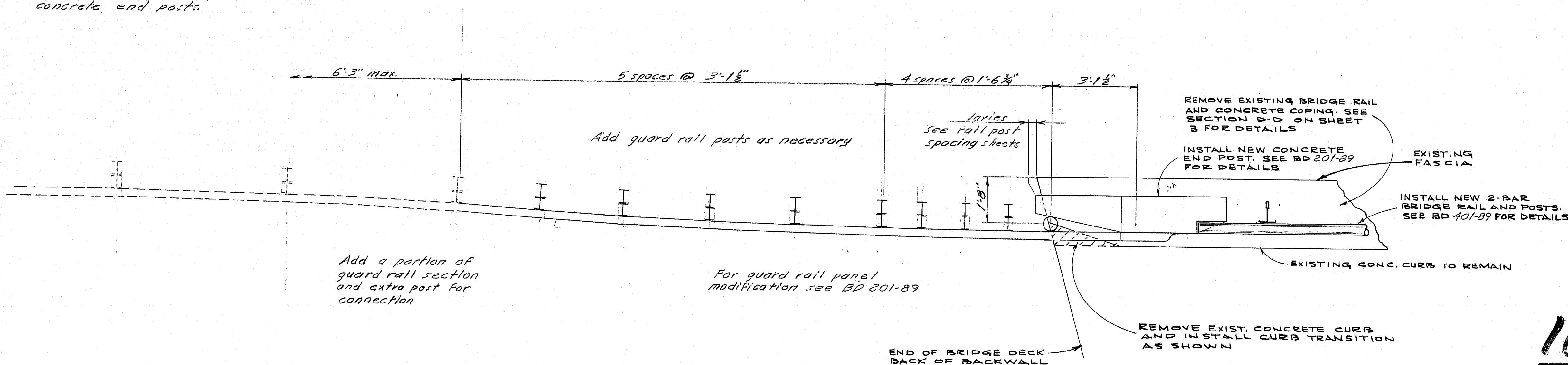
**NOTE**  
The following labor and material shall be paid for under Item 606.173, Bridge Connection:  
- Excavation and backfill  
- Concrete for new end posts.  
- All hardware for approach rail anchor.  
- W-Beam Terminal Connector (RE-5-79).  
- Remove, reset and add new guard rail posts.  
- Additional beam rail panel, with extra holes.  
- Additional holes in existing beam rail panels.  
- Protective Coating for Concrete Surfaces shall be applied to all exposed surfaces of concrete end posts.

Additional holes required in guard rail panels 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.



END POST AND BRIDGE RAIL DETAILS

I-95 S.B. & N.B. OVER WEBB ROAD, WATERVILLE



PLAN VIEW-END POST & GUARD RAIL TRANSITION DETAIL

I-95 S.B. & N.B. OVER MAIN STREET, WATERVILLE  
I-95 S.B. & N.B. OVER OAKLAND ROAD, WATERVILLE

105-42

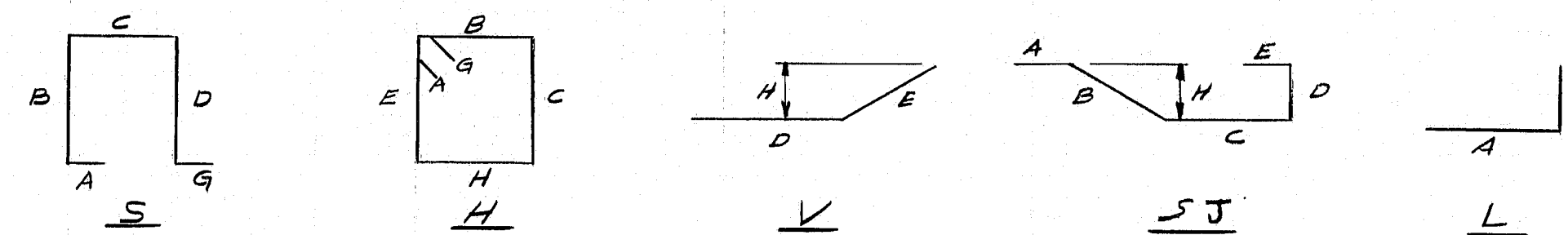
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
  
WATERVILLE  
SECTIONS & DETAILS



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

ESTIMATED QUANTITIES									
Item No.	Description	Total Quantity	Unit	S.B. over Main Street	N.B. over Main Street	S.B. over Webb Road	N.B. over Webb Road	S.B. over Oakland Road	N.B. over Oakland Road
202.127	Removal of Existing Bituminous Pavement	1	L.S.	0.15	0.15	0.13	0.13	0.25	0.19
202.12	Removal of Existing Structural Concrete	104	C.Y.	24	24	11	11	17	17
202.13	Removal of Existing Railings (Retained by Department)	2072	L.F.	330	330	276	276	440	420
403.10	Hot Bituminous Pavement Grading D	935	T	121	121	118	116	212	147
403.121	Hot Bituminous Pavement Grading E (trimming)	60	T	10	10	10	10	10	10
502.260	Structural Concrete Roadway & Sidewalk Slabs on Steel Bridges (346 Y.)	1	L.S.	-	-	0.5	0.5	-	-
502.70	Bridge Drains	12	Ea.	-	-	6	6	-	-
502.75	Plugging Existing Bridge Drains	12	Ea.	-	-	6	6	-	-
503.12	Reinforcing Steel Fabricated and Delivered	8264	lbs.	584	584	2964	2964	584	584
503.13	Reinforcing Steel Placing	8,264	lbs.	584	584	2964	2964	584	584
506.142	Field Painting Existing Structural Steel	1	L.S.	0.15	0.03	0.12	0.12	0.35	0.23
507.092	Aluminum Bridge Railing, 2 bar	1906	L.F.	304	304	247	247	414	390
508.13	Membrane Waterproofing	1	L.S.	0.14	0.14	0.15	0.15	0.25	0.17
514.06	Curing Box For Concrete Cylinders	1	Ea.	0.15	0.15	0.20	0.20	0.15	0.15
516.30	Rehab. of Structural Concrete Slab-to-rein. steel	1600	S.F.	247	247	212	212	370	312
516.31	Rehab. of Structural Concrete Slab-to-below rein. steel	400	S.F.	0	0	106	106	0	88
520.2401	Bridge Joint Modification - Pier #1	6	Ea.	1	1	1	1	1	1
520.2402	Bridge Joint Modification - Pier #2	6	Ea.	1	1	1	1	1	1
526.301	Temporary Concrete Barrier Type 1	1	L.S.	0.16	0.16	0.16	0.16	0.18	0.18
609.13	Vertical Bridge Curb Type 1	552	L.F.	-	-	276	276	-	-
~ BREAKDOWN OF LUMP SUM ITEMS ~									
202.127	Removal of Existing Bituminous Pavement	3998	S.Y.	549	549	590	590	1026	694
506.142	Field Painting Existing Structural Steel	12138.46	Lb.	180600	30200	139120	139120	432106	292200
508.13	Membrane Waterproofing	3998	S.Y.	549	549	590	590	1026	694
526.301	Temporary Concrete Barrier	3770	L.F.	610	610	620	620	660	650

## REINFORCING STEEL SCHEDULE



### BENDING DIAGRAMS

Reinforcing Bar: ASTM A615 Grade 60  
Bending details shall conform to the recommendations of ACI Standard 315-65

All dimensions are out to out of reinf. bar.  
First digit following the letter of the Mark indicates the size of the reinf. bar.

Mark	No	Length	Type	A	B	C	D	E	G	H	Remarks
EP401	96	4'-11"	S	0	2'-0"	11"	2'-0"	-	0	-	4 each end post (vertical)
EP402	48	4'-6"	S	0	2'-0"	6"	2'-0"	-	0	-	2 each end post (vertical)
EP500	96	7'-10"	S	0	5'-6"	7"	1'-9"	-	0	-	4 each end post (horizontal)
EP501	96	6'-8"	SJ	0	3'-1"	2'-7"	1'-0"	0	-	8"	4 each end post (horizontal)
EP502	32	4'-7"	S	0	1'-10"	11"	1'-10"	-	0	-	4ea. end post (vert.) Webb Road only
EP503	16	4'-2"	S	0	1'-10"	6"	1'-10"	-	0	-	2ea. end post (vert.) Webb Road only
WW306	44	5'-10"	SJ	0	1'-2"	1'-0"	1'-2"	6"	-	1'-2"	Wing wall modifications
C602	584	3'-4"	S	0	1'-2"	1'-0"	1'-2"	-	0	-	Curbs; originally C2
D600	72	2'-8"	L	2'-0"	8	-	-	-	-	-	6 at each drain Webb Road
D601	48	2'-5"	L	1'-2"	8	-	-	-	-	-	4 at each drain Webb Road

### STRAIGHT BARS

EP400	144	2'-0"	6 each end post (vertical)
EP405	144	1'-10"	6 each end post (vertical)
EP600	192	2'-10"	12ea. end post (vertical) N.B. & S.B. Oakland Rd. & Main St.
WW505	16	10'-1"	Wingwall modifications
C503	32	15'-8"	Curbs; originally C3
C504	32	14'-11"	Curbs; originally C4
C505	8	12'-6"	Curbs; originally C5

\* EP600 replaces EP502 & EP503 as shown on BD 201-89.  
EP600 bars shall be drilled and grouted in the same locations as the EP502 & EP503

105-43

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
I-95 NORTHBOUND & SOUTHBOUND OVER
WEBB ROAD OAKLAND ROAD MAIN STREET WATERVILLE
ESTIMATED QUANTITIES REINFORCING STEEL SCHEDULE
SHEET 6 OF 11 AUGUSTA, MAINE

As Bui 8/31/96 GHM/Mark  
95-6(62) Waterville