PROJECT: WBS 45361

CONTRACT:

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TIME: 8:47:26 AM
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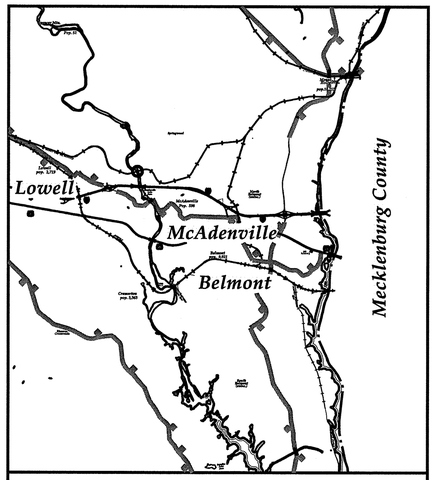
STATE OF NORTH CAROLINA
NCDOT RAIL DIVISION

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	WBS 45361	1	-

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
WBS 45361		

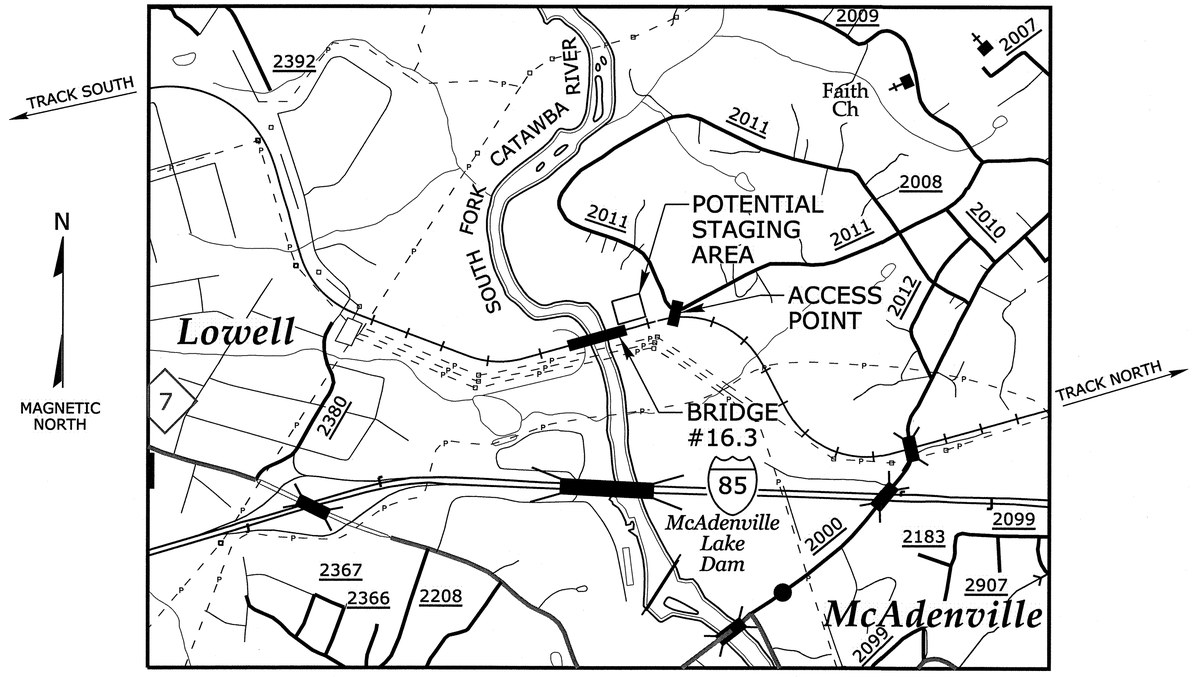
P&N CORRIDOR REACTIVATION
SOUTH FORK CATAWBA RIVER BRIDGE
GASTON COUNTY



VICINITY MAP

LOCATION: BRIDGE ON PIEDMONT & NORTHERN CORRIDOR RAIL LINE AT MP SFC 16.3 OVER THE SOUTH FORK CATAWBA RIVER

TYPE OF WORK: BRIDGE PRESERVATION, STRUCTURAL STEEL REPAIR, CLEANING & PAINTING OF STRUCTURE



STRUCTURES

GRAPHIC SCALES

PLANS 0

PROFILE (HORIZONTAL) 0

PROFILE (VERTICAL) 0

PROJECT LENGTH

LENGTH OF STRUCTURE PROJECT = 0.09 MILES

Prepared In the Office of:

HDR Engineering, Inc. of the Carolinas
3733 National Drive, Suite 207 Raleigh, N.C. 27612
N.C.B.E.L.S. License Number: F-0116

2012 STANDARD SPECIFICATIONS

LETTING DATE:
FEBRUARY 25, 2014

CRAIG M. NEWTON, PE
PROJECT ENGINEER

MATTHEW J. MOYER, PE
PROJECT DESIGN ENGINEER

DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 032129 ENGINEER MATTHEW J. MOYER

1-10-14

Matthew J. Moyer P.E.
SIGNATURE:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
RAIL DIVISION
ENGINEERING & SAFETY BRANCH

MAIL: 1553 MAIL SERVICE CENTER RALEIGH, NC 27699-1553
DELIVERY: 1 SOUTH WILMINGTON STREET RALEIGH, NC 27601
PHONE: (919) 715-8803

PROJECT: WBS 45361

CONTRACT:

STATE OF NORTH CAROLINA
NCDOT RAIL DIVISION

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	WBS 45361	1A	-

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
WBS 45361		

P&N CORRIDOR REACTIVATION
SOUTH FORK CATAWBA RIVER BRIDGE
GASTON COUNTY

LOCATION: BRIDGE ON PIEDMONT & NORTHERN CORRIDOR RAIL LINE AT MP SFC 16.3 OVER THE SOUTH FORK CATAWBA RIVER

TYPE OF WORK: BRIDGE PRESERVATION, STRUCTURAL STEEL REPAIR,

INDEX OF SHEETS

STRUCTURES

* ANTICIPATED EXISTING DRAWINGS APPLICABLE TO THIS PROJECT.

PROJECT LENGTH

LENGTH OF STRUCTURE PROJECT = 0.09 MILES

Prepared In the Office of:

HDR Engineering, Inc. of the Carolinas
3733 National Drive, Suite 207 Raleigh, N.C. 27612
N.C.B.E.L.S. License Number: F-0116

2012 STANDARD SPECIFICATIONS

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PROJECT ENGINEER

MATTHEW J. MOYER, PE
PROJECT DESIGN ENGINEER

LETTING DATE:
FEBRUARY 25, 2014

DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 032129 ENGINEER MATTHEW J. MOYER

1-10-14

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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
RAIL DIVISION
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STATE PROJECT REFERENCE NO.	SHEET NO.
WBS 45361	2

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF QUANTITIES

GENERAL NOTES

1. THE EXISTING STRUCTURE DIMENSIONS AND CONDITIONS INDICATED ON THE PLANS ARE FROM THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IN WRITING PRIOR TO ORDERING MATERIALS AND/OR BEGINNING CONSTRUCTION IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.
2. CONSTRUCTION METHODS, PROCEDURES AND SEQUENCES ARE THE CONTRACTOR'S RESPONSIBILITY AND THE CONTRACTOR SHALL TAKE ALL THE NECESSARY MEANS TO MAINTAIN AND PROTECT THE STRUCTURAL INTEGRITY OF THE BRIDGE AND ALL CONSTRUCTION AT ALL STAGES.
3. THE MANUFACTURER'S CERTIFIED DRAWINGS AND SPECIFICATION FOR EQUIPMENT ANCHORAGE AND DETAILS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
4. FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
5. FOR UNDER STRUCTURE WORK PLATFORM, SEE SPECIAL PROVISIONS.
6. FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
7. FOR STRUCTURAL STEEL REPAIR, SEE SPECIAL PROVISIONS.
8. FOR RIVET REMOVAL AND REPLACEMENT WITH BOLT, SEE SPECIAL PROVISIONS.
9. FOR PAINTING EXISTING STRUCTURES, SEE SPECIAL PROVISIONS.
10. FOR PACK RUST REMOVAL, SEE SPECIAL PROVISIONS.
11. FOR CLEANING, LUBRICATING AND PAINTING EXISTING BEARINGS, SEE SPECIAL PROVISIONS.
12. FOR DOCUMENTATION OF BEARING REPAIR, SEE SPECIAL PROVISIONS.
13. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES", JANUARY 2012, NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (HEREIN CALL STANDARD SPECIFICATIONS), EXCEPT AS NOTED HEREIN, ELSEWHERE ON PLANS, OR IN THE SPECIAL PROVISIONS.
14. STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH CURRENT AREMA SPECIFICATIONS.
15. CONTROL OF WORK: ALL WORK INVOLVED IN THE CONSTRUCTION OF THE RAILWAY STRUCTURE SHALL BE PERFORMED SATISFACTORY TO THE ENGINEER AND/OR PIEDMONT & NORTHERN RAILWAY. ALL METHODS OF HANDLING THE WORK AFFECTING THE SAFETY OF RAIL OPERATIONS MUST BE APPROVED BY THE RAILWAY COMPANY BEFORE PROCEEDING WITH THAT PORTION OF WORK. RAIL TRAFFIC SHALL, AT ALL TIMES, BE MAINTAINED AND PROTECTED. THE CONTRACTOR SHALL NOT AT ANY TIME DELAY OR INTERFERE WITH RAIL OPERATIONS.
16. INASMUCH AS THE PAINT SYSTEM ON THE EXISTING STRUCTURAL STEEL CONTAINS LEAD, THE CONTRACTOR'S ATTENTION IS DIRECTED TO ARTICLE 107-1 OF THE STANDARD SPECIFICATIONS. ANY COSTS RESULTING FROM COMPLIANCE WITH APPLICABLE STATE OR FEDERAL REGULATIONS PERTAINING TO HANDLING OF MATERIALS CONTAINING LEAD BASED PAINT SHALL BE INCLUDED IN THE BID PRICE FOR POLLUTION CONTROL.
17. REMOVAL AND REPAIR OF PORTIONS OF THE EXISTING BRIDGE SUPERSTRUCTURE MEMBERS SHALL BE PERFORMED SO AS TO NOT ALLOW DEBRIS TO FALL INTO THE WATER. THE CONTRACTOR SHALL SUBMIT PLANS FOR REMOVAL AND REPAIR IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.
18. ONLY ITEMS SHOWN IN THE PLANS AS PAY ITEMS WILL BE PAID FOR. COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND INCIDENTALS FOR THE ENTIRE CONTRACT SHALL BE IN THE PRICE BID FOR PAY ITEMS. SEE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS FOR DESCRIPTION OF PAY ITEMS.
19. CONTRACTOR SHALL BE PROPERTY LICENSED TO PERFORM THE WORK AS REQUIRED BY THE STATE OF NORTH CAROLINA.

TOTAL BILL OF MATERIAL

	MOBILIZATION	UNDER STRUCTURE WORK PLATFORM	STRUCTURAL STEEL REPAIR, APPROX. LBS	RIVET REMOVAL AND REPLACEMENT WITH BOLT	PAINTING * PLATE GIRDERS OF BRIDGE MP SFC 16.3	PAINTING ** TRUSS OF BRIDGE MP SFC 16.3	POLLUTION CONTROL	CLEANING, LUBRICATING AND PAINTING EXISTING BEARINGS	DOCUMENTATION OF BEARING REPAIR
	LUMP SUM	LUMP SUM	LB	EACH	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM
BRIDGE MP SFC 16.3	LUMP SUM	LUMP SUM	930	160	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM

* A PAINTING AREA OF 10,500 SF IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY
** A PAINTING AREA OF 40,500 SF IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY

PROJECT NO. WBS 45361

GASTON COUNTY

STATION: --

MILE POST: SFC 16.3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL NOTES AND TOTAL BILL OF MATERIAL

NORTH CAROLINA PROFESSIONAL SEAL 032129 ENGINEER MATTHEW J. MOYER
1-10-14

HDR Engineering, Inc. of the Carolinas
3733 National Drive, Suite 207 Raleigh, N.C. 27612
N.C.B.E.L.S. License Number: F-0116

REVISIONS						SHEET NO. S-01
NO.	BY:	DATE:	NO.	BY:	DATE:	
1	--	--	3	--	--	TOTAL SHEETS 4
2	--	--	4	--	--	

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DES CHK: D. WAGNER DATE: 11/13
DWG BY: B. PETERSON DATE: 11/13
CHK BY: M. MOYER DATE: 11/13

ORIGINATED		YELLOW HIGHLIGHTED & REDLINE CHECKED		BLUE HIGHLIGHTED CHANGES		CHANGES VERIFIED BY	
INITIALS	DATE	INITIALS	DATE	INITIALS	DATE	VERIFIED	DATE

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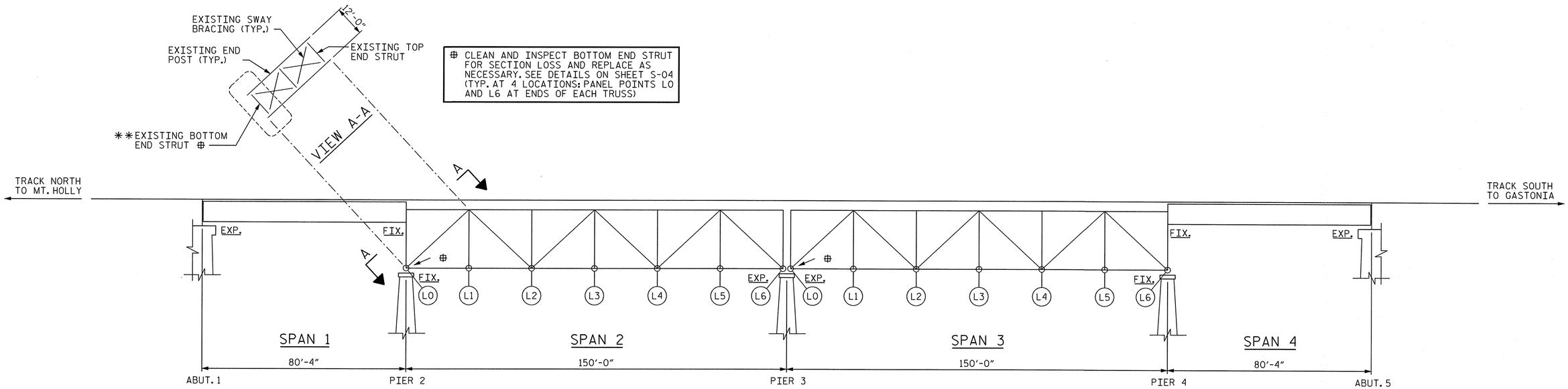
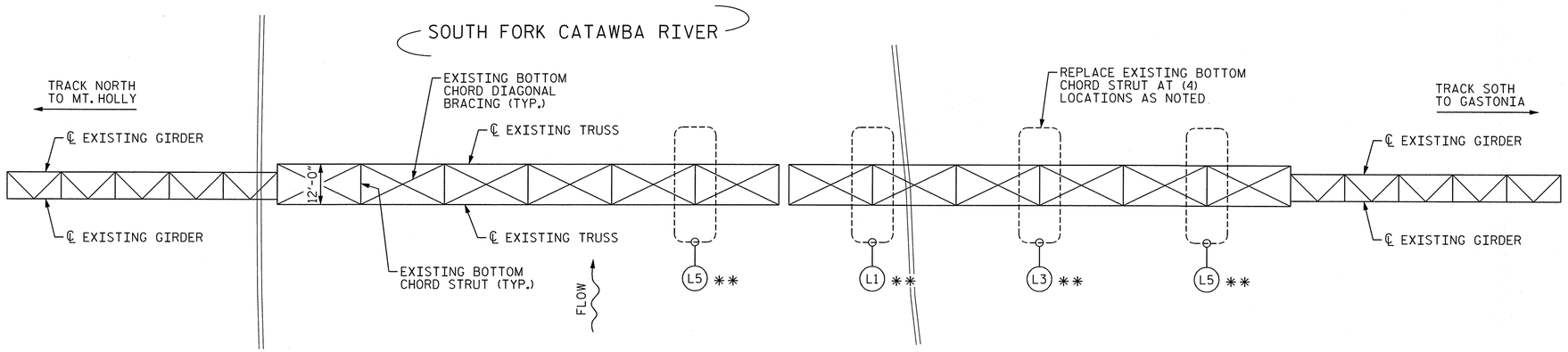


WEST LONGITUDINAL ELEVATION

**ORIGINAL FABRICATION DETAILS ON SHEET SFC 16.3 - 17 OF 24



PLAN OF BOTTOM CHORD FROM ABOVE

**ORIGINAL FABRICATION DETAILS ON SHEET SFC 16.3 - 17 OF 24

PROJECT NO. WBS 45361

GASTON COUNTY

STATION: --

MILE POST: SFC 16.3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

NORTH CAROLINA PROFESSIONAL SEAL 032129 ENGINEER MATTHEW J. MOYER
1-10-14

HDR Engineering, Inc. of the Carolinas
3733 National Drive, Suite 207 Raleigh, N.C. 27612
N.C.B.E.L.S. License Number: F-0116

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-02
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2	--	--	4	--	--	4

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DES CHK:	D. WAGNER	DATE :	11/13	CHK BY:	M. MOYER	DATE :	11/13

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INITIALS	DATE	INITIALS	DATE		INITIALS	DATE	VERIFIED	DATE

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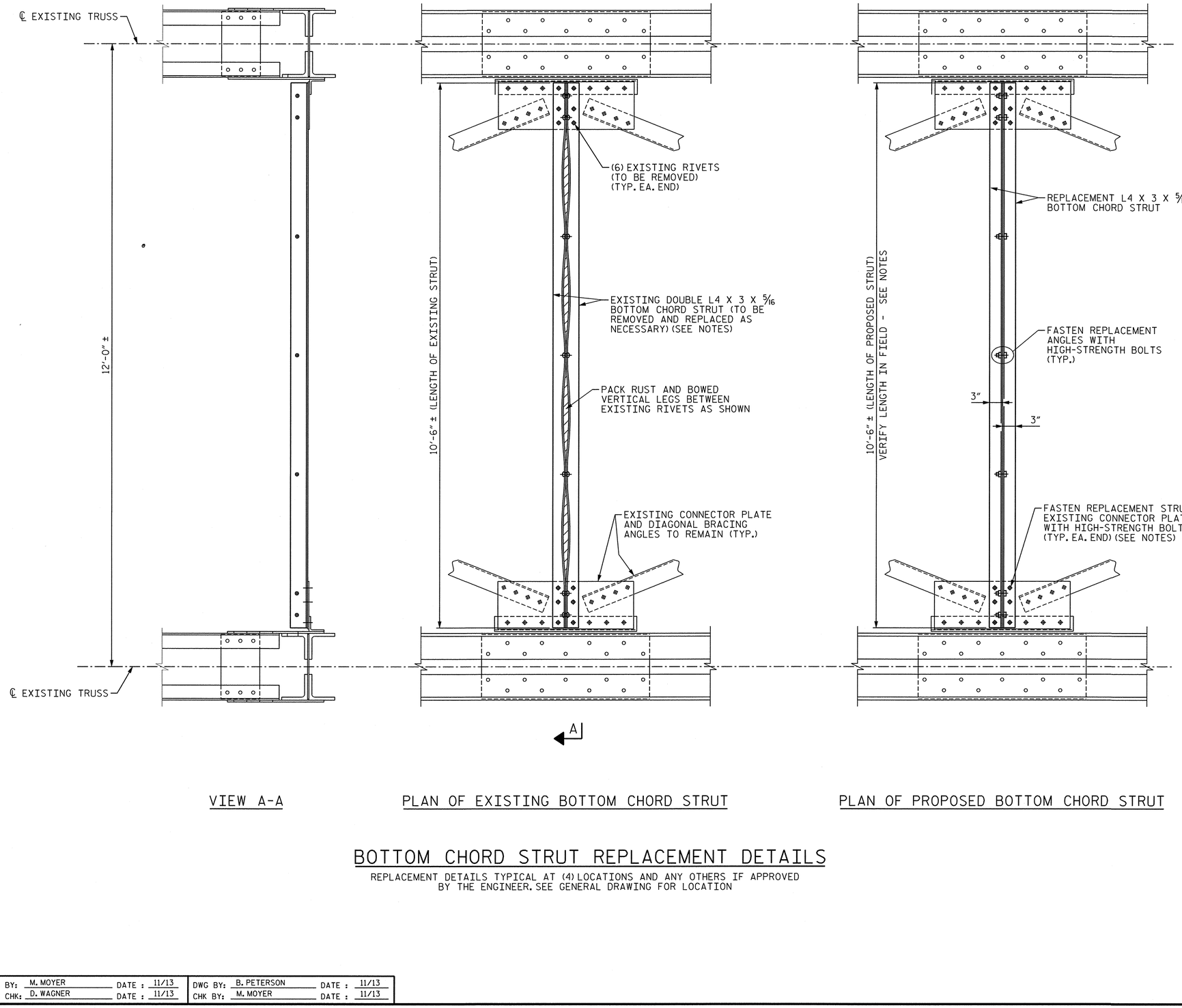

VIEW A-A

PLAN OF EXISTING BOTTOM CHORD STRUT

PLAN OF PROPOSED BOTTOM CHORD STRUT

STRUCTURAL STEEL NOTES

1. ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE 50W.
2. ALL CONNECTION BOLTS SHALL BE ASTM A325 HIGH STRENGTH STRUCTURAL BOLTS.
3. ALL STRUCTURAL STEEL SHALL BE SHOP PRIMED BEFORE INSTALLATION.
4. BOTTOM CHORD STRUT IDENTIFIED AS BS5 IN EXISTING BRIDGE PLANS, SHEET SFC 16.3 - 17 OF 24.

LATERAL BRACING REPLACEMENT PROCEDURE:

1. SUPPORT THE STRUCTURE PRIOR TO REMOVING EXISTING STRUT.
2. REMOVE DAMAGED STRUT.
3. MATCH DRILL HOLES IN REPLACEMENT STRUT.
4. EXISTING CONNECTOR PLATES SHALL BE CLEAN AND FREE OF LOOSE RUST PRIOR TO CONNECTING REPLACEMENT STRUT.
5. INSTALL REPLACEMENT STRUT AND FASTEN WITH HIGH STRENGTH BOLTS.

BOTTOM CHORD STRUT REPLACEMENT DETAILS

REPLACEMENT DETAILS TYPICAL AT (4) LOCATIONS AND ANY OTHERS IF APPROVED BY THE ENGINEER. SEE GENERAL DRAWING FOR LOCATION

PROJECT NO. WBS 45361

GASTON COUNTY

STATION: --

MILE POST: SFC 16.3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BOTTOM CHORD STRUT REPLACEMENT DETAIL

NORTH CAROLINA PROFESSIONAL SEAL 032129 ENGINEER MATTHEW J. MOYER

1-10-14

HDR Engineering, Inc. of the Carolinas
3733 National Drive, Suite 207 Raleigh, N.C. 27612
N.C.B.E.L.S. License Number: F-0116

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-03
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2	--	--	4	--	--	4

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DES CHK: D. WAGNER DATE: 11/13

DWG BY: B. PETERSON DATE: 11/13
CHK BY: M. MOYER DATE: 11/13

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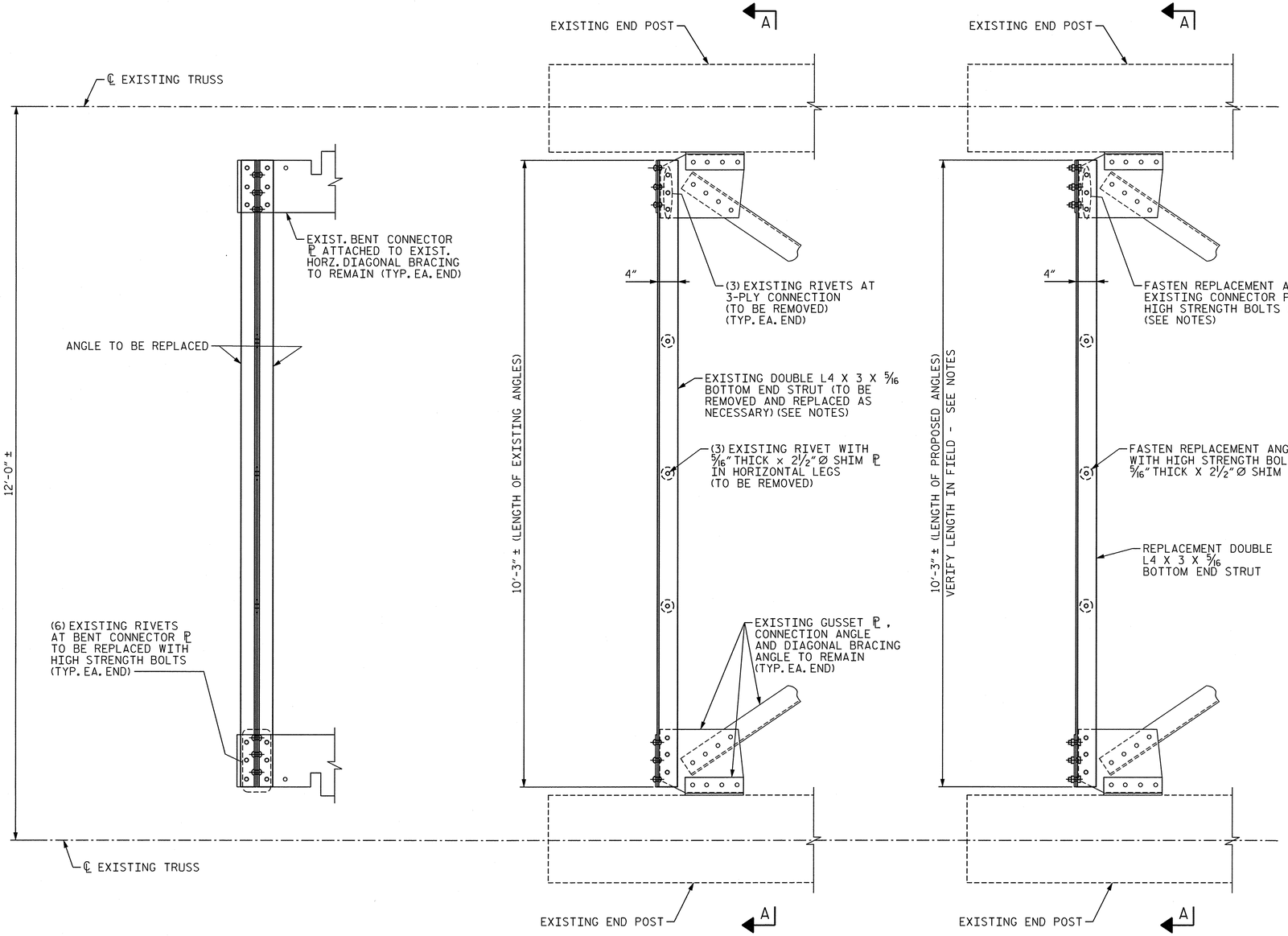

VIEW A-A

PLAN OF EXISTING BOTTOM END STRUT

PLAN OF PROPOSED BOTTOM END STRUT

NOTES:

1. SEE SHEET S-3 FOR ADDITIONAL NOTES
2. BOTTOM END STRUT IDENTIFIED AS BS6 IN EXISTING BRIDGE PLANS, SHEET SFC 16.3 - 17 OF 24.

BOTTOM END STRUT REPLACEMENT PROCEDURE:

1. CLEAN DEBRIS FROM EXISTING STRUT AND CONNECTOR PLATES TO ALLOW FOR ACCURATE MEASUREMENT OF STEEL THICKNESS. THE CONTRACTOR SHALL MEASURE THE THICKNESS OF EACH ANGLE LEG IN THE PRESENCE OF THE ENGINEER USING AN ULTRASONIC DEVICE. IF ANY THICKNESS READING IS LESS THAN 0.25" AT ANY LOCATION THEN THE ENTIRE ANGLE SHALL BE REPLACED. SEE SPECIFICATIONS FOR ADDITIONAL NOTES AND REQUIREMENTS.
2. SUPPORT THE STRUCTURE PRIOR TO REMOVING EXISTING STRUT ANGLES.
3. REMOVE DAMAGED STRUT ANGLES.
4. MATCH DRILL HOLES IN REPLACEMENT STRUT ANGLES.
5. CLEAN EXISTING CONNECTOR PLATES SO THEY ARE FREE OF LOOSE RUST PRIOR TO CONNECTING REPLACEMENT STRUT ANGLES.
6. INSTALL REPLACEMENT STRUT ANGLES AND FASTEN WITH HIGH STRENGTH BOLTS.

BOTTOM END STRUT REPLACEMENT DETAILS

REPLACEMENT DETAILS TYPICAL AT (4) LOCATIONS
SEE GENERAL DRAWING FOR LOCATION

ORIGINATED		YELLOW HIGHLIGHTED & REDLINE CHECKED		BLUE HIGHLIGHTED CHANGES		CHANGES VERIFIED BY	
INITIALS	DATE	INITIALS	DATE	INITIALS	DATE	VERIFIED	DATE

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TIME: 8:49:05 AM

DES BY:	M. MOYER	DATE :	11/13	DWG BY:	B. PETERSON	DATE :	11/13
DES CHK:	D. WAGNER	DATE :	11/13	CHK BY:	M. MOYER	DATE :	11/13

NORTH CAROLINA PROFESSIONAL SEAL 032129 ENGINEER MATTHEW J. MOYER
1-10-14

HDR Engineering, Inc. of the Carolinas
3733 National Drive, Suite 207 Raleigh, N.C. 27612
N.C.B.E.L.S. License Number: F-0116

PROJECT NO. WBS 45361
GASTON COUNTY
STATION: --
MILE POST: SFC 16.3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BOTTOM END STRUT REPLACEMENT DETAIL

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-04
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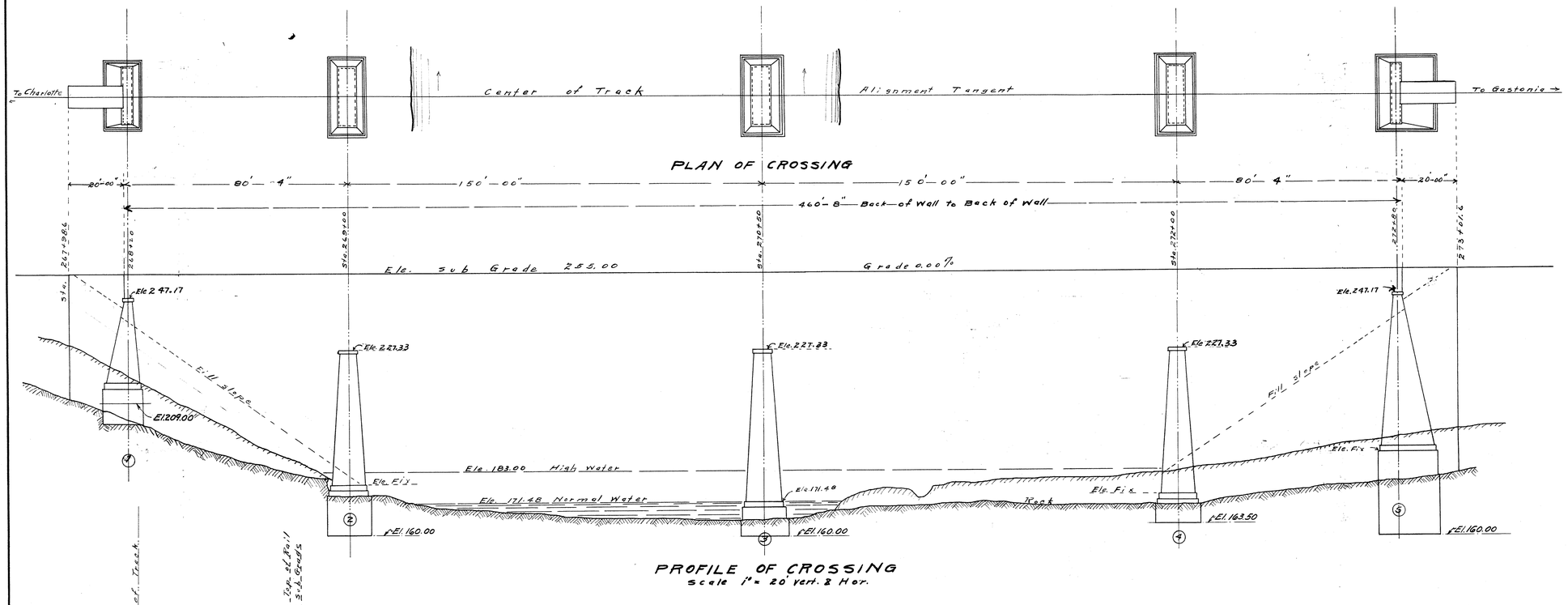
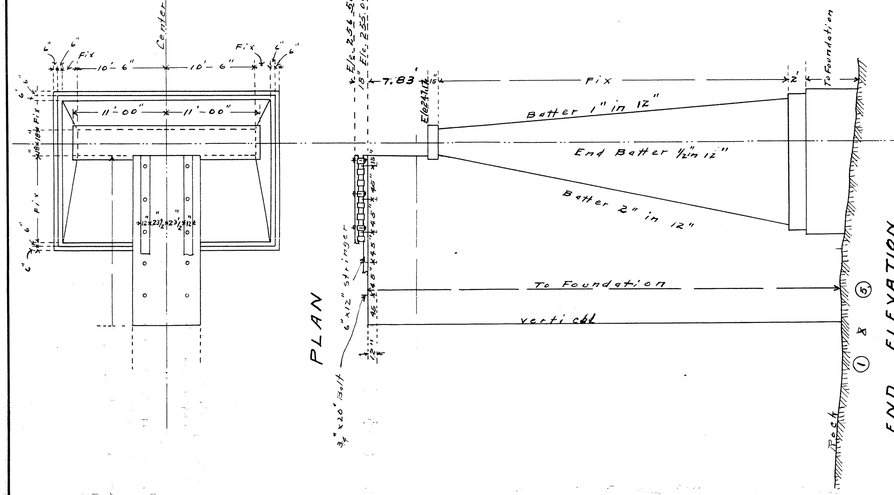
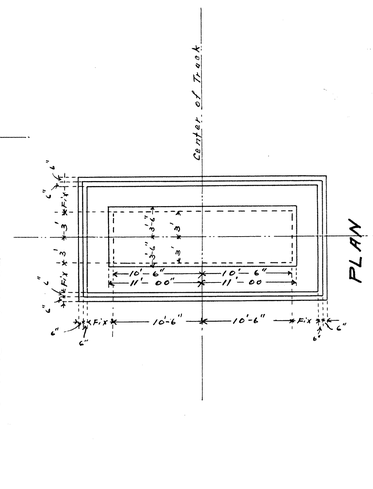
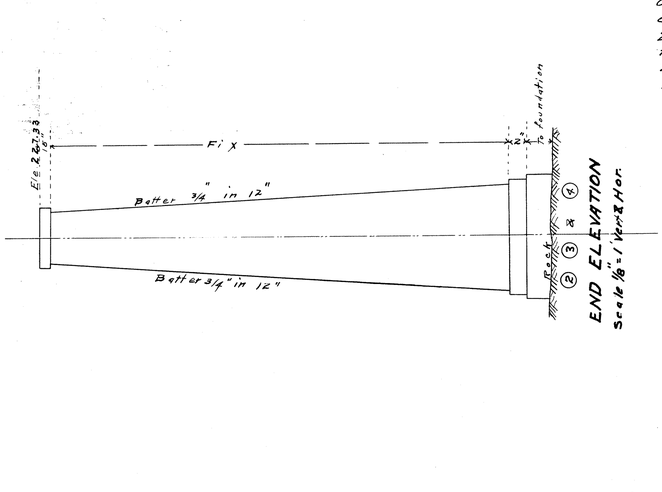








GENERAL REMARKS

The super structure to consist of 2-148'-6" Riveted Deck Trusses with a 80' Deck Plate Girder approaches at each end.

Size of Piers 2, 3 & 4 over Coping 7'x22'-15" Thick. Size of Pier under Coping 6'x21'. The Batter of Pier is 3/4" in 12" all around. 1st off set of Pier 3 is the elevation of the surface of Normal water. Off set is 6" all around and a vertical face of 2'

2nd offset of Pier 3 is the elevation of 2' below the surface of Normal Water with a vertical face to foundation.

1st off set on Piers 2 & 4 to be at Elevation of the surface of water if the foundation is 4' or more below the surface of normal water with the 1st & 2nd off set the same as Pier 3. If the foundation is found to be less than 4' below the surface of normal water in Pier 2 & 4. Then the 1st offset will be 4' above the foundation and the 2nd off set 2' below the 1st off set.

Pier Abutments 1 & 5 are to be the dimentions as shown in drawing. Elevation of top of Masonry stem to be elevation of sub Grade, which is 18" below the top of Rail. The size of Stem is 8'x 8o: Stem is vertical to Foundation.

Stringers are 6" x 12" Placed and held in place as shown in drawing.

The Cross ties & Guard Rails are to conform to the requirements of Standard Trestle Plans.

IMPORTANT NOTE:-

It is necessary that the batter lines on piers and abutments strike within the foundation concrete. To accomplish this, as a general rule, offsets of 6" each will be made at approximately 2' and 4' above foundation. From 4' above foundation, batter lines will run unbroken to undercoping. The Resident Engr. will be governed by the above in building this bridge. Note added (7-1-11)

PIEDMONT TRACTION COMPANY
CROSSING OF THE SOUTH FORK CATAWBA RIVER

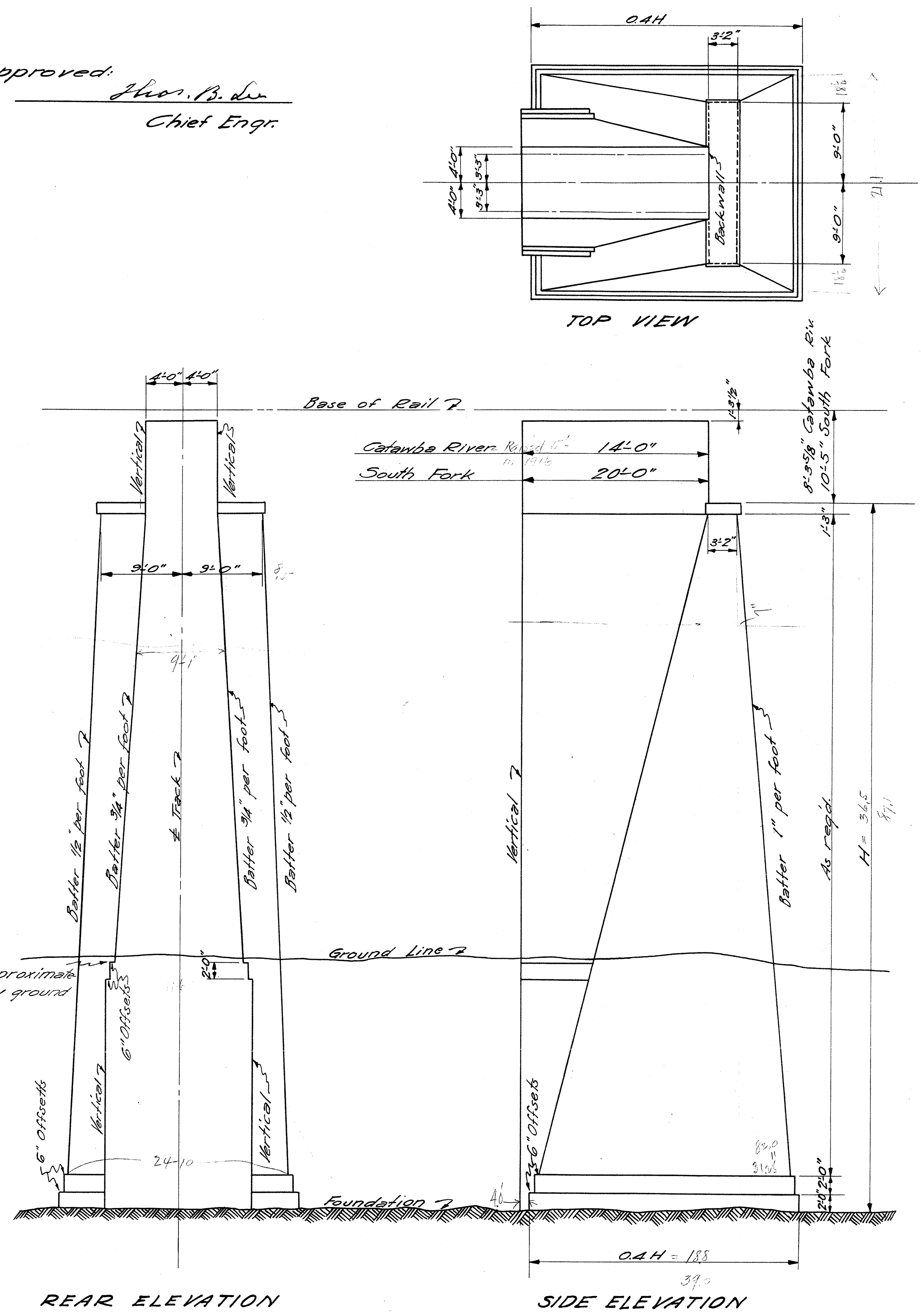
Five Miles West of Mount Holly, N.C.

April 26, 1911

Revised 5-11-11

SFC 16.3-1 (5/34) Revised

Approved: Thos. B. Lee
Chief Engr.

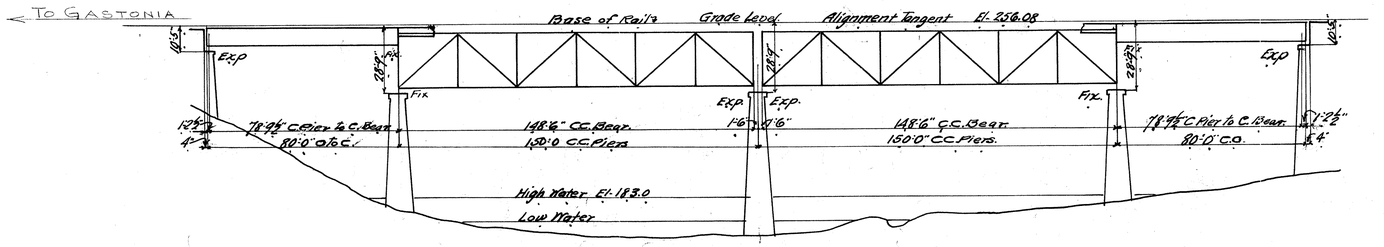


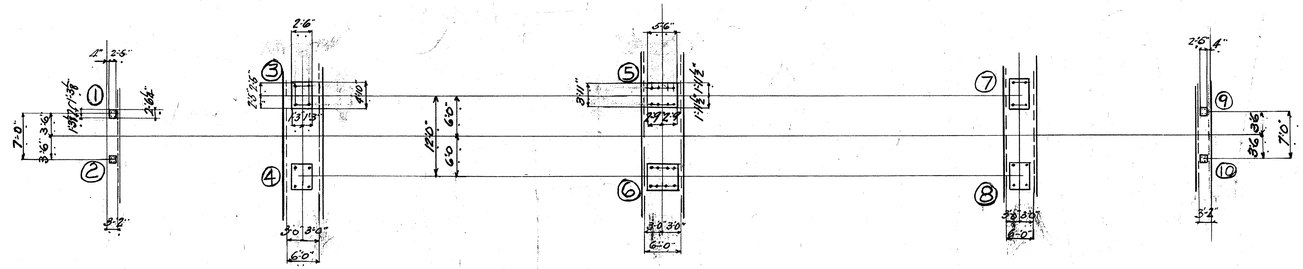
THE PIEDMONT TRACTION CO.
Plan to be followed in building both Abutments of Bridge over the South Fork of the Catawba River and the South Abutment of the Bridge over the Catawba River.
Scale 1 in. = 8 ft.

Office of Chief Engr.,
Charlotte, N.C.
July 3, 1911.
Rev. 7-18-11

SFC 16.3-2

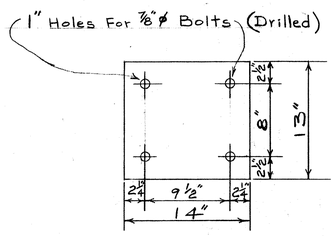
B / 40





List Of Proposed Shims September, 1962		
Location	Type Plate	Thickness
1	A	3"
2	A	2¾"
3	None	0
4	"	0
5	"	0
6	"	0
7	"	0
8	"	0
9	A	5/16"
10	A	¾"

Note - Shim Plates Placed At Locations ① And ②, June 24, 1963.
Shim Plates Placed At Locations ⑨ And ⑩, June 25, 1963.



Shim Plate Type "A"

Anchor Bolts placed after erection

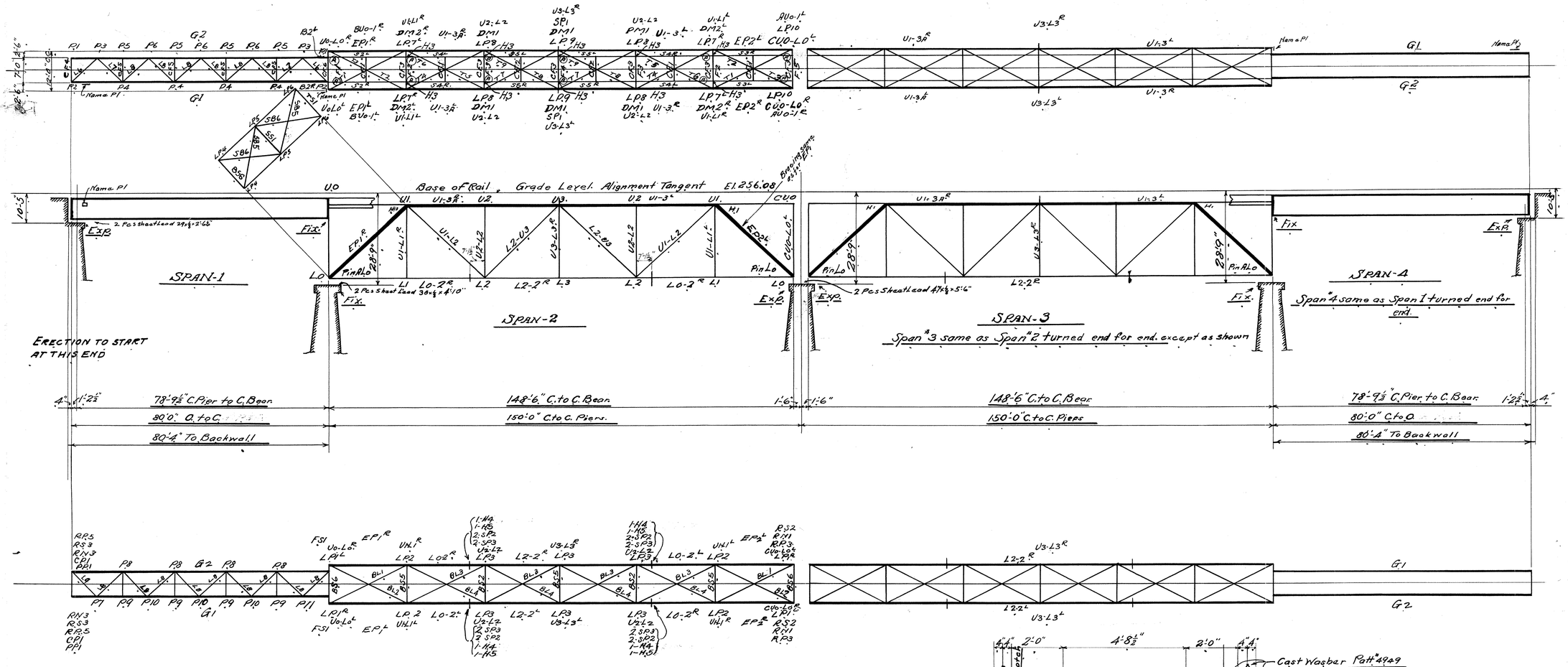
MASONRY PLAN.

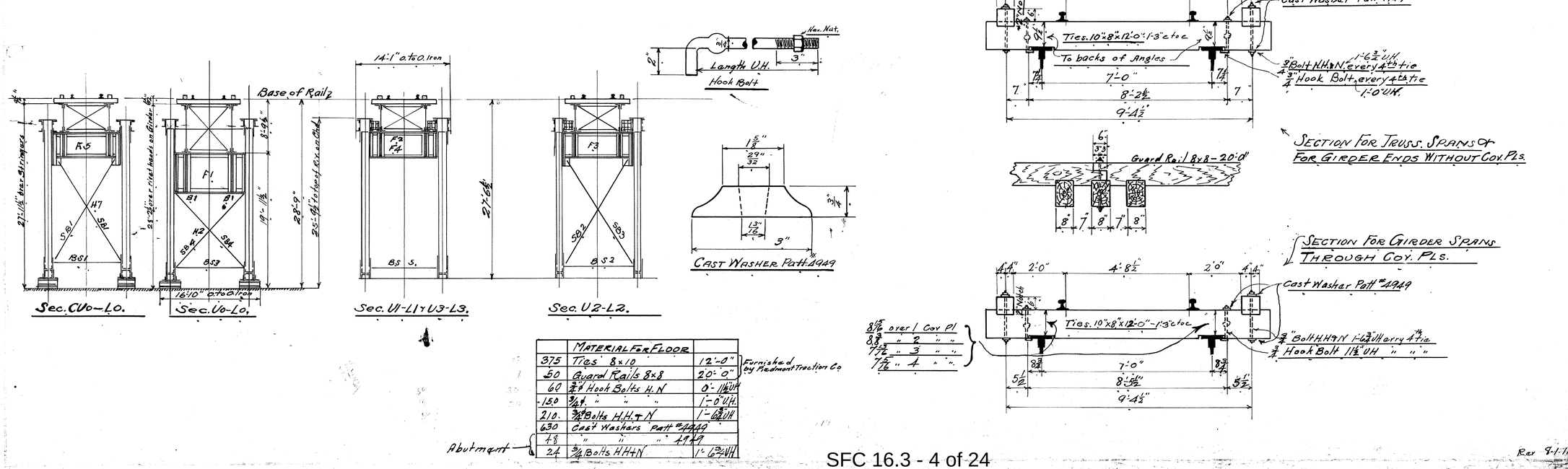
PIEDMONT TRACTION COMPANY.
BRIDGE over SOUTH FORK of CATAWBA RIVER
NEAR LOWELL N.C.
2 S.T. Deck Riveted Truss Spans 148'-6" C. to C.
2 S.T. Deck Plate Girder Spans 80'-8" C. to C.
Scale 3/8" = 1'-0"

AMERICAN BRIDGE COMPANY,
DRAWING MADE AT Edge Moor PLANT.
WORK FABRICATED AT Edge Moor PLANT.
IN CHARGE OF Searles
DRAW. MADE BY JDS
DRAW. CHECKED BY W.S.T.D.
ORDER NO. D1505
SHEET NO. 21

Rev. June 27, 1911

Rev. 3-5-63 - Shim Plates Added





	MATERIAL FOR FLOOR	
375	Ties 8x10	12'-0"
50	Guard Rails 8x8	20'-0"
60	¾" Hook Bolts H.N	0'-11½"U.H.
150	¾" " " "	1'-0" U.H.
210	¾" Bolts H.H.T.N	1'-6½"U.H.
630	Cast Washers Patt #4949	
48	" " " 4949	
24	¾" Bolts H.H.N	1'-6½"U.H.

Furnished by Piedmont Traction Co

LIST OF SHEETS	
MASONRY PLAN	E.1
ERECTING DIAG.	E2
END POSTS	1.
TOP CHORDS	2.
END TOP & BOT. T. CHORDS	3
VERTICAL POSTS	4
" "	5.
" " & DIAGONALS	6.
FIX. SHOES & BED PLATES	7.
EXPANSION SHOES	8.
FLOOR BEAMS	9
STRINGERS	10.
"	11
TOP LATERALS	12
BOT. "	13
SWAY BRACING	14
80'-0" GIRDER	15.A
" "	15.B
BRACE FRAMES	16
CAST SHOES	17
FLOOR & ANCHOR BOLTS	C1
PINS	C2

ERECTION DIAG.
PIEDMONT TRACTION COMPANY
BRIDGE OVER SOUTH FORK OF CATAWBA RIVER NEAR LOWELL N.C.
2-S.T.D. Riveted Truss Spans 148'-6" c to c
2-S.T.D. Plate Girder Spans 80-8" o to o

EDGE MOOR
EDGE MOOR
C.E. SEARLES
J.W.S.
J.S.T.B.
7-28-11

Rev 8-1-11

D1505 E2

SFC 16.3 - 4

Notes:–

Material, Medium O.H. Steel.
Rivets 7/8" diam.
Open holes 15/16" diam.
All holes for shop rivets punched full size.
All open holes punched full size except where marked "R.T." which are punched 3/4" ϕ and reamed to 15/16" ϕ to match iron templet.
For shop bill see page 51.

Required				
Number To Make	Shipping Mark	Contract D1505	Contract D1507	Contract D1512
6	EP1R	2	2	2
6	EP1L	2	2	2
6	EP2R	2	4	
6	EP2L	2	4	
24	H1	8	12	4

Rev. 8-1-11

End Posts

D1505 { Piedmont Traction Company
Bridge over South Fork of Catawba River
Near Lowell N.C.
2-S.T.D. Riveted Truss Spans 148'-6" c to c
2-S.T.D. Plate Girder Spans 80'-8" o to o

D1507 { Piedmont Traction Company
Bridge over Catawba River
Mount Holly N.C.
3-S.T.D. Riveted Truss Spans 148'-6" c to c
2-S.T.D. Plate Girder Spans 60'-0" long

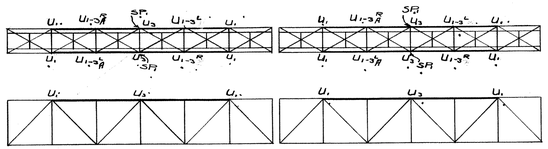
D1512 { Greenville Spartanburg & Anderson Ry.
Bridge over Saluda River
Near Pelzer S.C.
1-S.T.D. Riveted Truss Span 148'-6" c to c

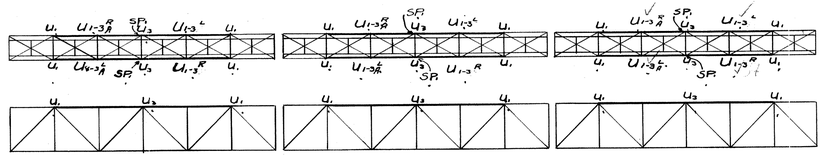
Scale 3/4" = 1'-0"

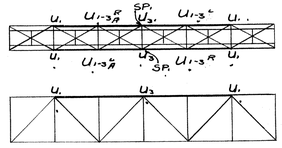
Edge Moor
Edge Moor
Searles
R.J.B. 5-29-11
J.S.T.B 7-12-11

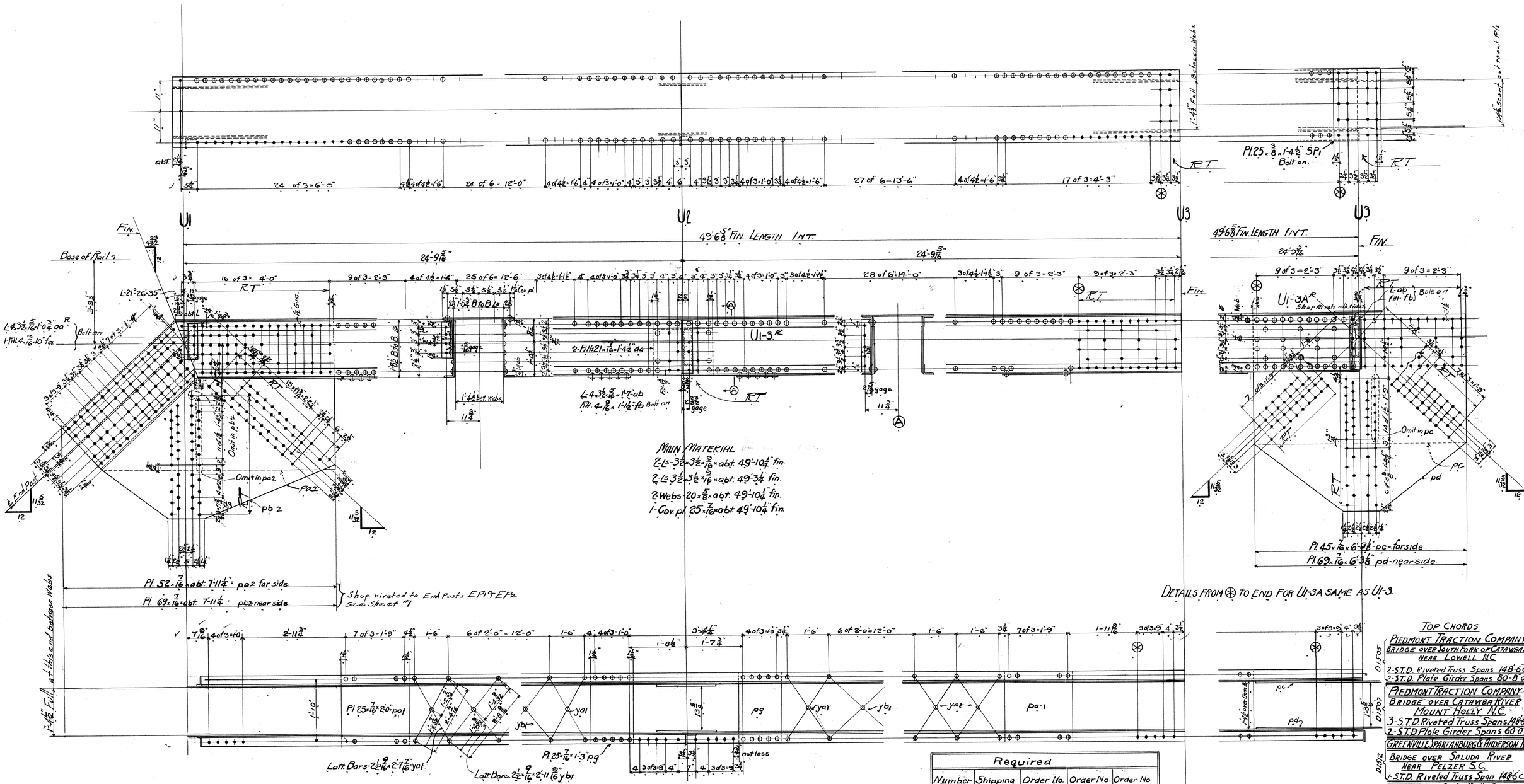
D1505
D1507
D1512
1

SFC 16.3-5









Main Material

2-Ls 3½ × 3½ × 9/16 × abt. 49'-10¼" fin.
2-Ls 3½ × 3½ × 7/16 × abt. 49'-3¾" fin.
2 Webs 20 × 5/8 × abt. 49'-10¼" fin.
1-Cov. pl. 25 × 7/16 × abt. 49'-10¼" fin.

Details from ⊗ to end for U1-3A same as U1-3.

Notes:—

Material, Medium O.H. Steel.
Rivets ⅞" diam.
Open holes 15/16" diam. All holes for shop rivets punched full size.
All open holes punched full size except where marked "R.T." which are punched 3/4" ϕ and reamed to 15/16" ϕ to match iron templet.
For shop bill see page 52.

Required					
Number to Make	Shipping Mark	Order No. D1505	Order No. D1507	Order No. D1512	
6	U1-3R	2	3	1	Top Chord
6	U1-3L	2	3	1	" "
6	U1-3AR	2	3	1	" "
6	U1-3AL	2	3	1	" "
12	SP1	4	6	2	Splice Plates.

Top Chords

Piedmont Traction Company
Bridge over South Fork of Catawba River
Near Lowell N.C.
2-S.T.D. Riveted Truss Spans 148'-6 ctoc
2-S.T.D. Plate Girder Spans 80-8 otoo
D1505

Piedmont Traction Company
Bridge over Catawba River
Mount Holly N.C.
3-S.T.D. Riveted Truss Spans 148'6 ctoc
2-S.T.D. Plate Girder Spans 60-0 long
D1507

Greenville Spartanburg & Anderson Ry.
Bridge over Saluda River
Near Pelzer S.C.
1-S.T.D. Riveted Truss Span 148'6 ctoc
D1512

Scale ¾" = 1'-0"

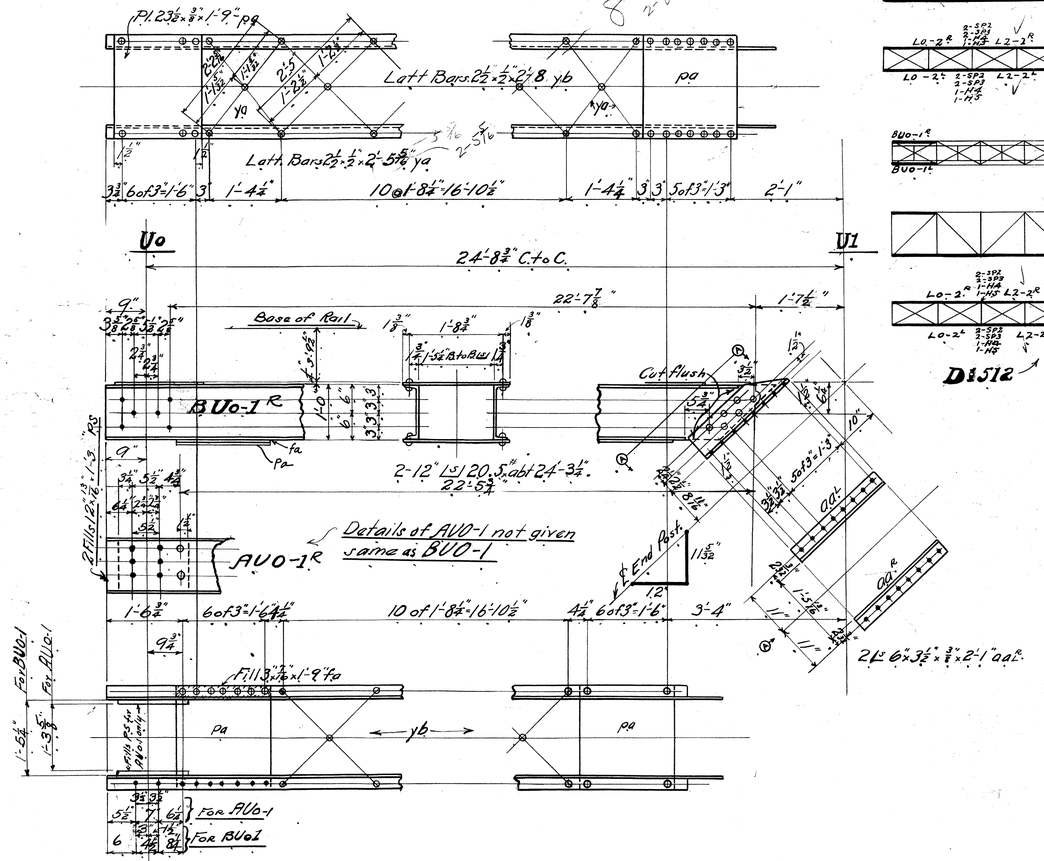
Edge Moor
Edge Moor
Searles
W.B. 5-19-11
J.S.T.B. 7-13-11

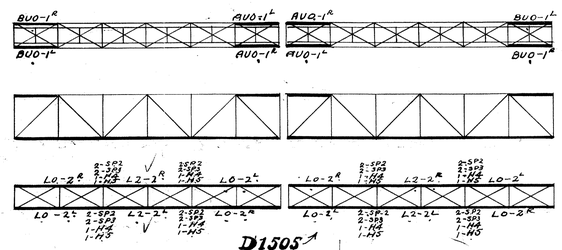
Rev 8-1-11

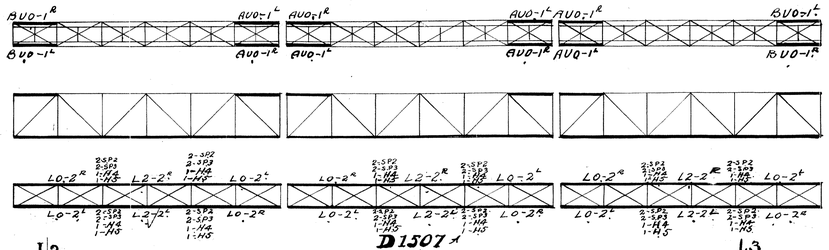
D-1505 D-1507 D-1512

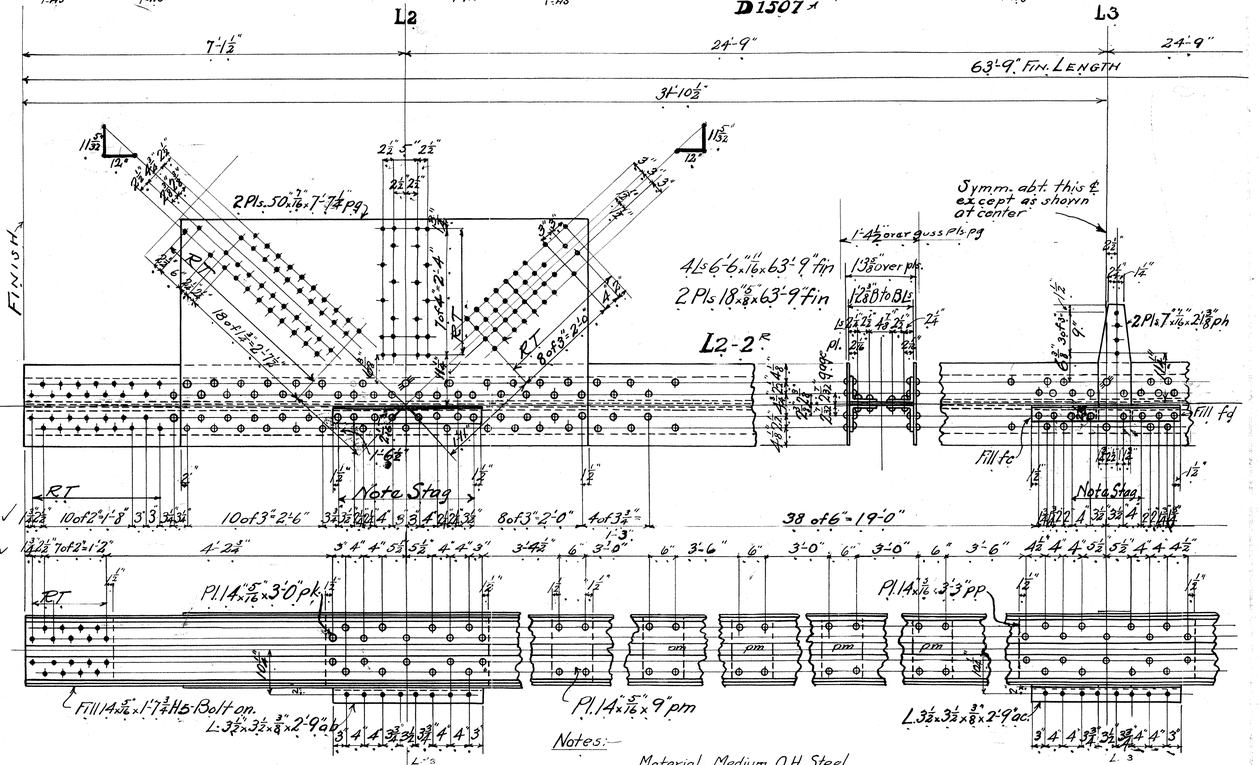
Sheet No. 2

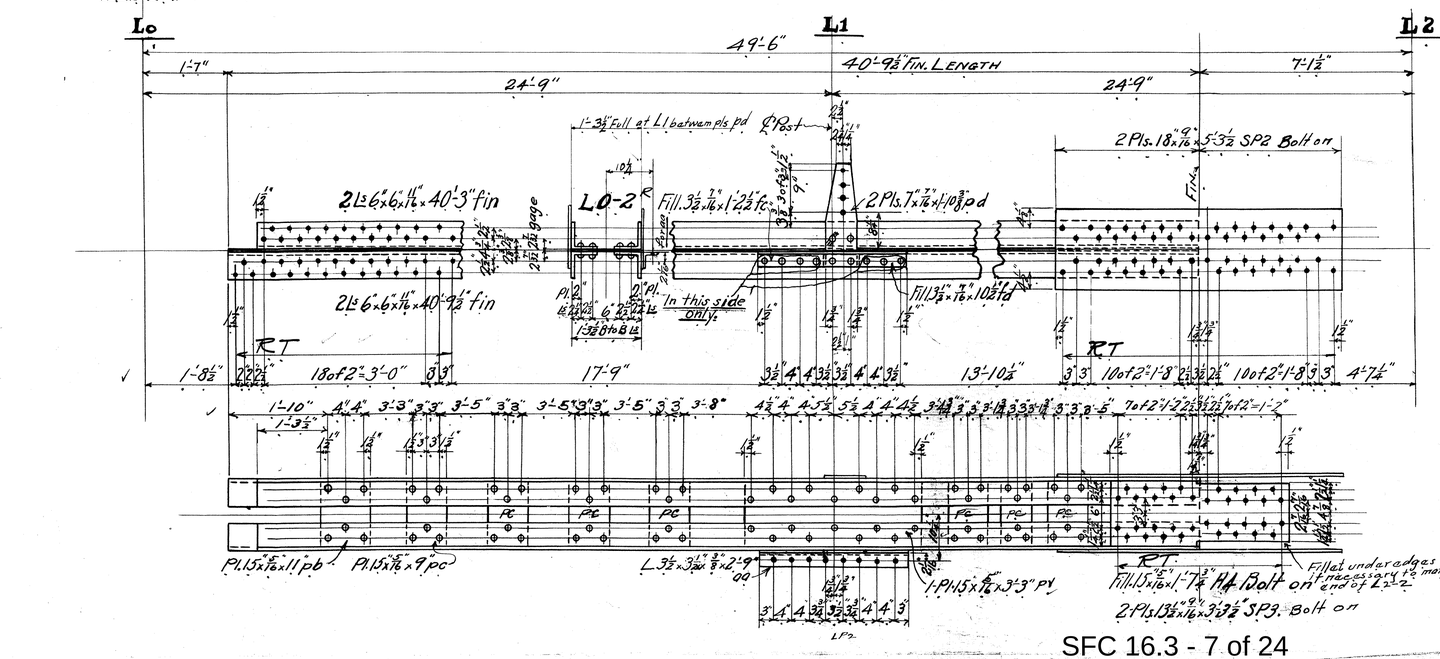
SFC 16.3 - 6 of 24











Required					
Number to Make	Shipping Mark	Order # D1505	Order # D1507	Order # D1512	
6	BUo-1R	2	2	2	Top Chords.
6	BUo-1L	2	2	2	" "
6	AUo-1R	2	4		" "
6	AUo-1L	2	4		" "
12	LO-2R	4	6	2	Bottom Chords.
12	LO-2L	4	6	2	" "
6	L2-2R	2	3	1	" "
6	L2-2L	2	3	1	" "
48	SP2	16	24	8	Splice Plates Bolton
48	SP3	16	24	8	" " "
24	H4	8	12	4	Splice fills. "
24	H5	8	12	4	" " "

Material, Medium O.H. Steel.
Rivets ⅞" diam.
Open holes 15/16" diam.
All open holes punched full size except where marked "R.T." which are punched ¾" ϕ and reamed to 15/16" ϕ to match iron templet.
All other holes punched full size except in material over ⅝" thick which are punched to ¾" ϕ and reamed to 15/16" ϕ
For shop bill see page 53½-53b

Notes:

End Top & Bottom Chords

D1505 — Piedmont Traction Company
Bridge over South Fork of Catawba River near Lowell N.C.
2-S.T.D. Riveted Truss Spans 148-6 ctoc
2-S.T.D. Plate Girder Spans 80-8 atoa

D1507 — Piedmont Traction Company
Bridge over Catawba River Mount Holly N.C.
3-S.T.D. Riveted Truss Spans 148-6 ctoc
2-S.T.D. Plate Girder Spans 60-0 long

D1512 — Greenville Spartanburg & Anderson Ry.
Bridge over Saluda River near Pelzer S.C.
1-S.T.D. Riveted Truss Span 148-6 ctoc

Scale ¾"=1'-0"

Edge Moor
Edge Moor
C.E. Searles
W.E.B. 5-22-1911
J.S.T.B. 5-14-1911

Rev. 8-10-11
Rev. 8-1-11

D1505, D1507, D1512 Sht. 3

Notes:-

Material, Medium O.H. Steel.
Rivets $\frac{7}{8}$" diam.
Open holes $\frac{15}{16}$" diam.
All holes for shop rivets punched full size.
All open holes punched full size except where marked "R.T." which are punched $\frac{3}{4}$"ϕ and reamed to $\frac{15}{16}$"ϕ to match iron templet.
For shop bill see page 54.

Required				
Number to Make	Shipping Mark	Order 1505	Order 1507	Order 1512
4	Uo-Lo R	2. ✓		2
4	Uo-Lo L	2. ✓		2
2.	AUo-Lo R		2. ✓	
2.	AUo-Lo L		2. ✓	
~~2.~~	~~BUo-Lo R~~			~~2.~~
~~2~~	~~BUo-Lo L~~			~~2.~~

VERTICAL POSTS

D1505 — PIEDMONT TRACTION COMPANY
BRIDGE OVER SOUTH FORK OF CATAWBA RIVER
NEAR LOWELL N.C.
2-S.T.D. Riveted Truss Spans 148'-6" c to c
2-S.T.D. Plate Girder Spans 80'-8" o to o

D1507 — PIEDMONT TRACTION COMPANY
BRIDGE OVER CATAWBA RIVER
MOUNT HOLLY N.C.
3-S.T.D. Riveted Truss Spans 148'-6" c to c
2-S.T.D. Plate Girder Spans 60'-0 long

D1512 — GREENVILLE SPARTANBURG & ANDERSON RY.
BRIDGE OVER SALUDA RIVER
NEAR PELZER S.C.
1-S.T.D. Riveted Truss Span 148'-6" c to c

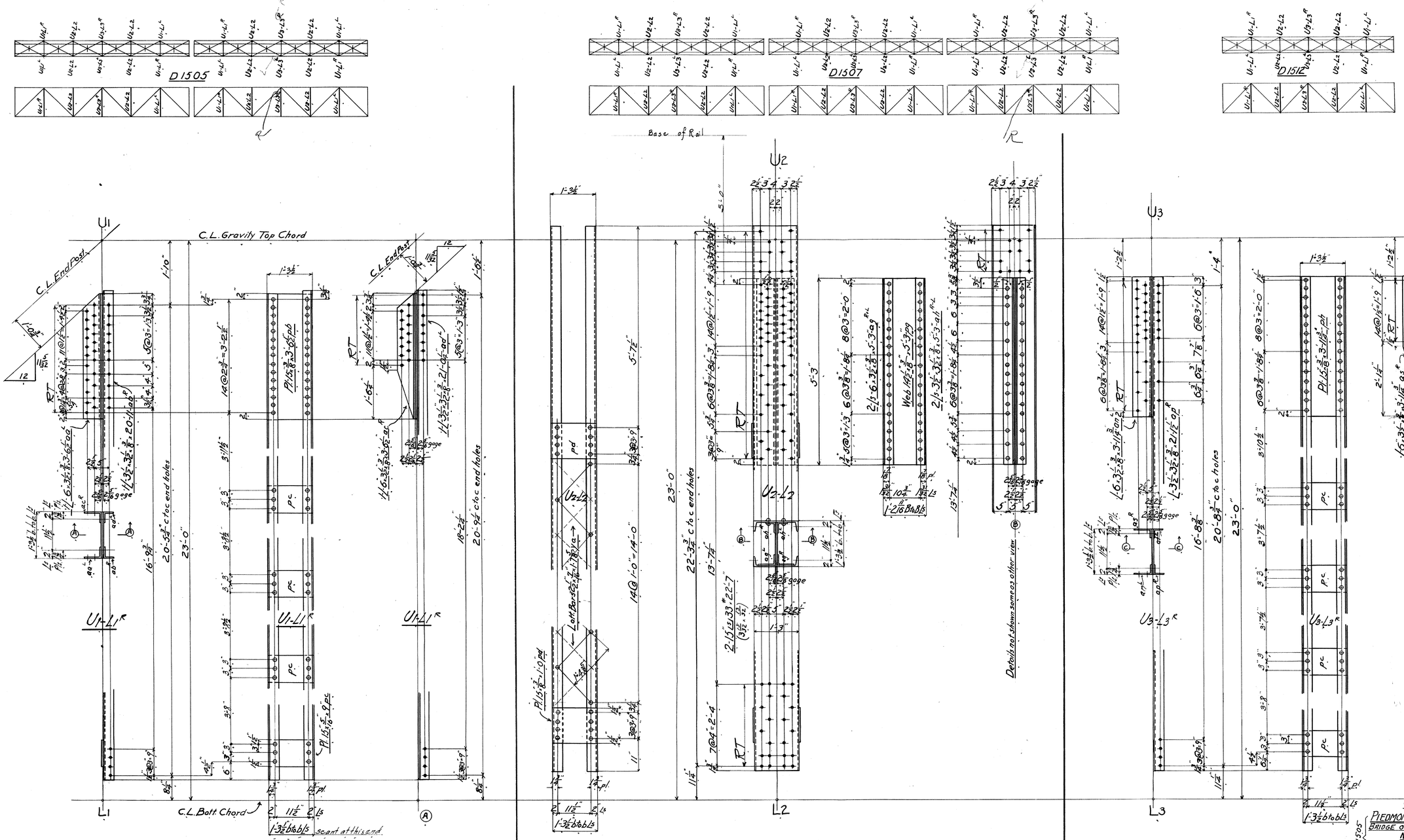
Scale $\frac{3}{4}$" = 1'-0"

EDGE MOOR
EDGE MOOR
SEARLES
J.W.S + W.B 5-26-11.
J.S.T.B 7-17-11.

Rev. 8/8/11

D-1505
D-1507
D-1512
4

SFC 16.3 - 8



Notes:-

Material, Medium O.H. Steel.
Rivets ⅞" diam.
Open holes 15/16" diam.
All open holes punched full size except where marked "R.T." which are punched ¾" and reamed to 15/16" to match iron templet.
All holes for shop rivets punched full size.
For shop bill see page S5.

	REQUIRED			
NUMBER TO MAKE	SHIPPING MARK	ORDER D1505	ORDER D1507	ORDER D1512
12	U1-L1R	4	6	2
12	U1-L1L	4	6	2
24	U2-L2	8	12	4
6	U3-L3R	2	3	1
6	U3-L3L	2	3	1

VERTICAL POSTS

D1505 — PIEDMONT TRACTION COMPANY.
BRIDGE OVER SOUTH FORK OF CATAWBA RIVER
NEAR LOWELL N.C.
2-S.T.D. Riveted Truss Spans 148'-6 c to c.
2-S.T.D. Plate Girder Spans 80'-8 o to o.

D1507 — PIEDMONT TRACTION COMPANY.
BRIDGE OVER CATAWBA RIVER.
MOUNT HOLLY N.C.
3-S.T.D. Riveted Truss Spans 148'-6 c to c.
2-S.T.D. Plate Girder Spans 60'-0 long.

D1512 — GREENVILLE SPARTANBURG & ANDERSON RY.
BRIDGE OVER SALUDA RIVER.
NEAR PELZER S.C.
1-S.T.D. Riveted Truss Span 148'-6 c to c.

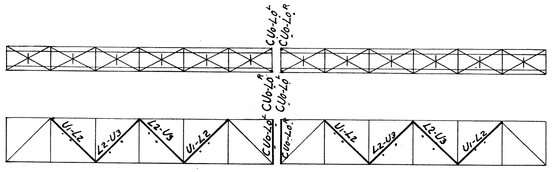
Scale ¼"=1'-0"

EDGE MOOR
EDGE MOOR
SEARLES
W.B.
B.R. 7-17-11

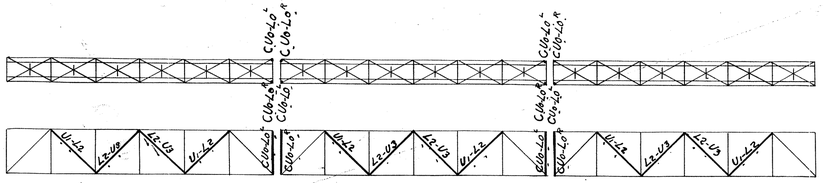
D1505.
D1507.
D1512.

5.

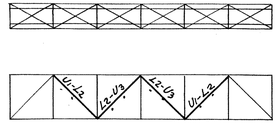
Rec'd 9/9/11



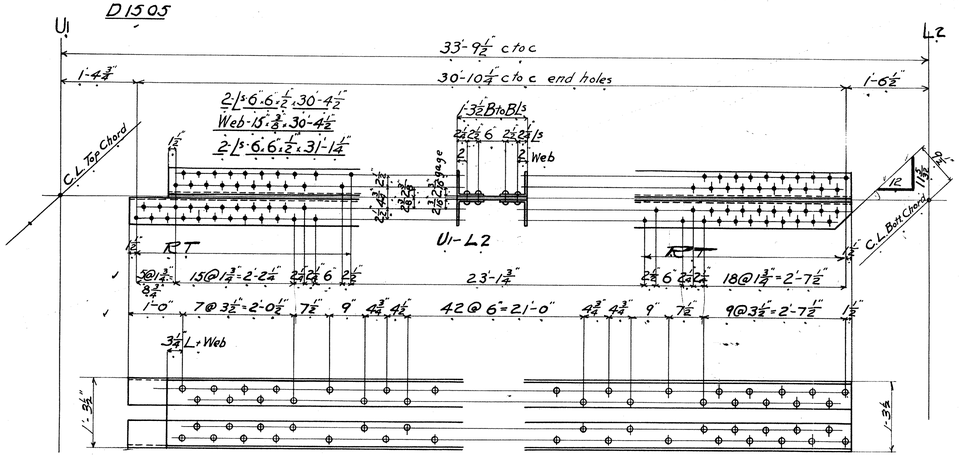
D1505

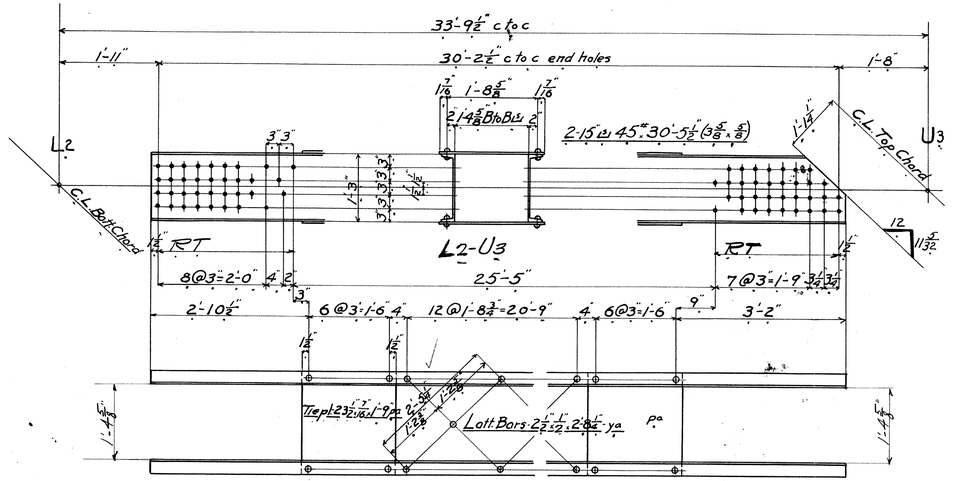


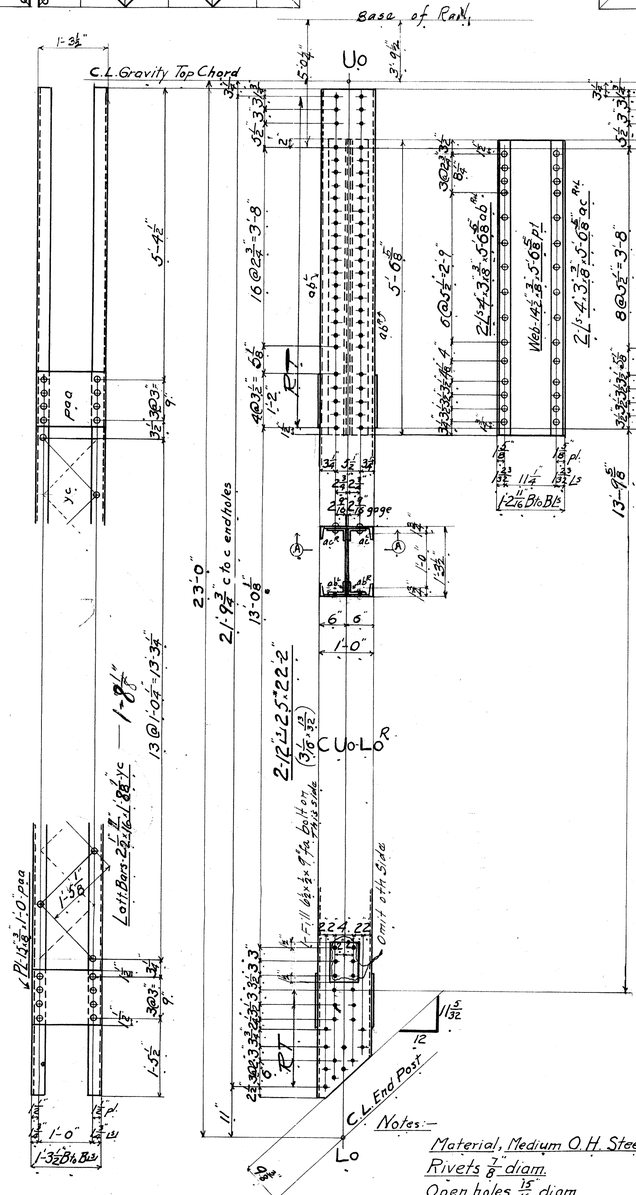
D1507



D1512







	REQUIRED			
NUMBER TO MAKE	SHIPPING MARK	ORDER D1505	ORDER D1507	ORDER D1512
24	U1-L2	8	12	4
24	L2-U3	8	12	4
6	CUo-Lo	2	4	
6	CUo-Lo	2	4	

Notes:—

Material, Medium O.H. Steel.
Rivets ⅞" diam.
Open holes 15/16" diam.
All open holes punched full size except where marked "R.T." which are punched ¾" and reamed to 15/16" to match iron templet.
All holes for shop rivets punched full size.
For shop bill see page 56.

VERTICAL POSTS & DIAGONALS

D1505 — PIEDMONT TRACTION COMPANY
BRIDGE OVER SOUTH FORK OF CATAWBA RIVER NEAR LOWELL N.C.
2-S.T.D. Riveted Truss Spans 148'-6 c to c
2-S.T.D. Plate Girder Spans 80'-8 c to c

D1507 — PIEDMONT TRACTION COMPANY
BRIDGE OVER CATAWBA RIVER MOUNT HOLLY N.C.
3-S.T.D. Riveted Truss Spans 148'-6 c to c
2-S.T.D. Plate Girder Spans 60'-0 long

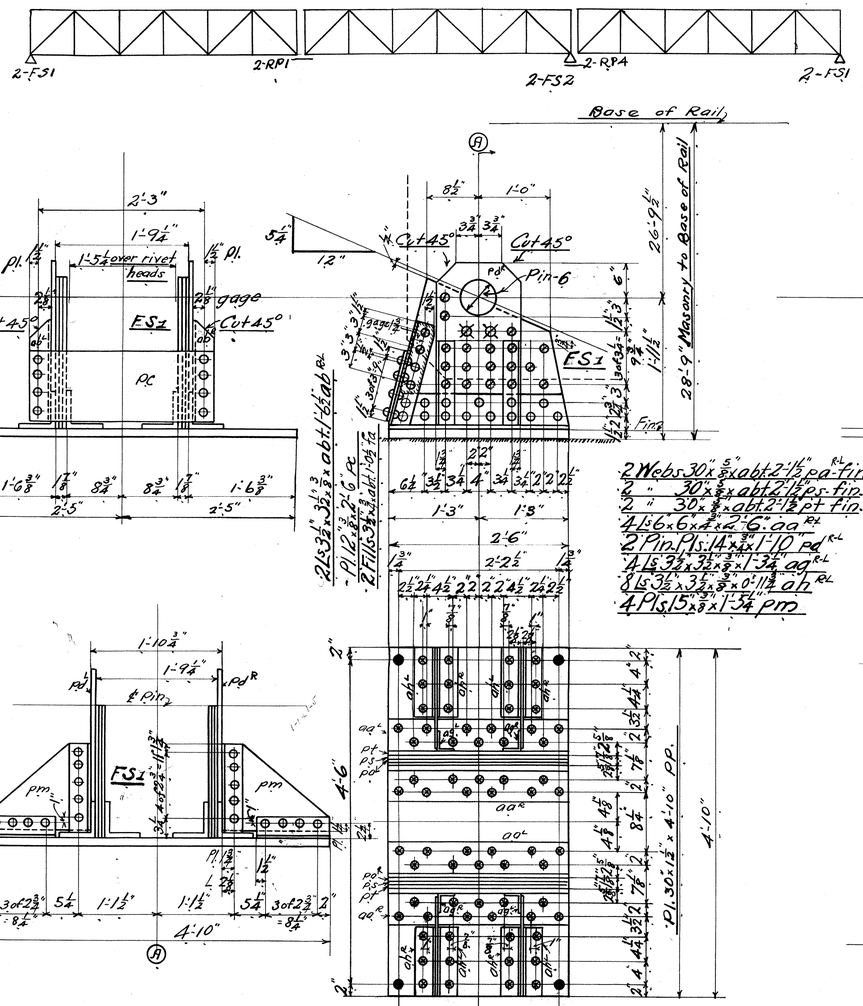
D1512 — GREENVILLE SPARTANBURG & ANDERSON RY.
BRIDGE OVER SALUDA RIVER NEAR PELZER S.C.
1-S.T.D. Riveted Truss Span 148'-6 c to c

Scale ¾"=1'-0"

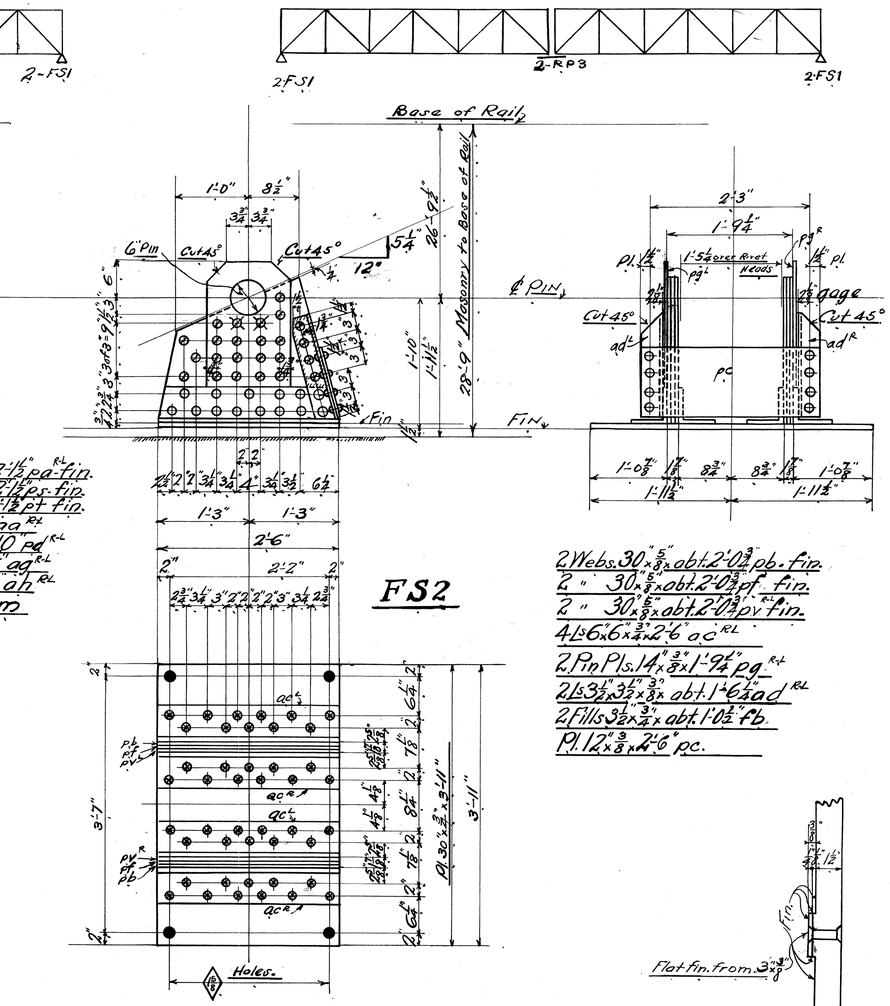
EDGE MOOR
EDGE MOOR
SEARLES
W.B. 6-26-11
CHECKED BY J.S.T.B. 7/18/11
SHEET NO.
D1505
D1507
D1512
6

REV. 8/9/11

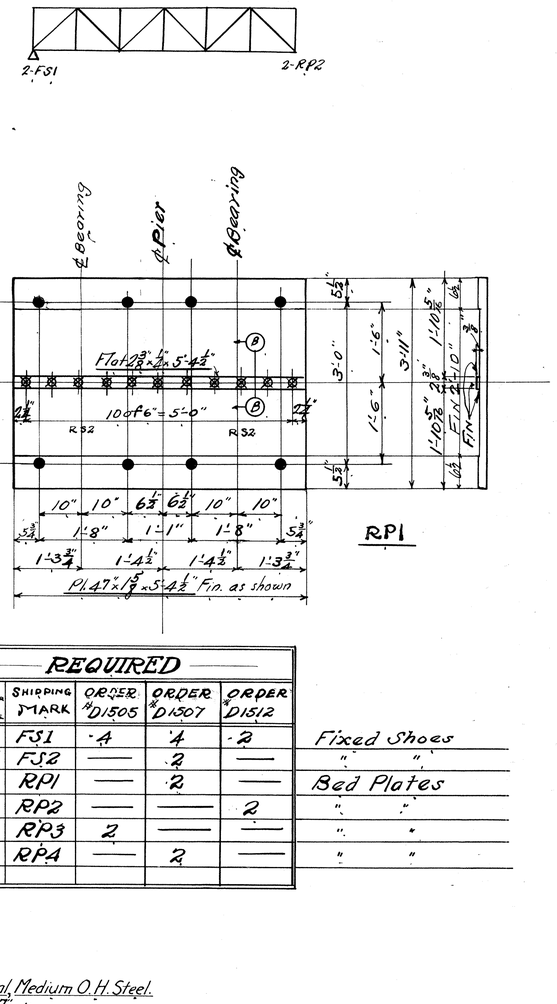
D1507



D1505



D1512



REQUIRED				
TOTAL NUMBER TO MARK	SHIPPING MARK	ORDER #D1505	ORDER #D1507	ORDER #D1512	
10	FS1	4	4	2	Fixed Shoes
2	FS2	—	2	—	" "
2	RP1	—	2	—	Bed Plates
2	RP2	—	—	2	" "
2	RP3	2	—	—	" "
2	RP4	—	2	—	" "

Notes:—

Material Medium O.H. Steel.
Rivets 7/8" diam.
Open holes as noted.
All holes punched full size except in material over 5/8" thick which are punched 3/4" ϕ and reamed to 15/16" ϕ
For shop bill see page 57

Fix. Shoes & Bed Pls.

D1505 — PIEDMONT TRACTION COMPANY
BRIDGE OVER SOUTH FORK OF CATAWBA RIVER NEAR LOWELL N.C.
2-S.T.D. Riveted Truss Spans 148'6" c to c.
2-S.T.D. Plate Girder Spans 80-8" c to c.

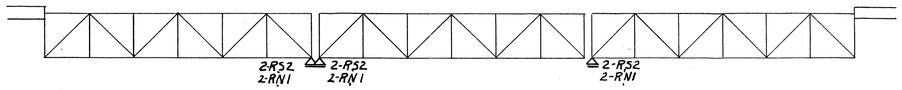
D1507 — PIEDMONT TRACTION COMPANY.
BRIDGE OVER CATAWBA RIVER. MOUNT HOLLY N.C.
3-S.T.D. Riveted Truss Spans 148'6" c to c.
2-S.T.D. Plate Girder Spans 60-0" long.

D1512 — GREENVILLE SPARTANBURG & ANDERSON RY.
BRIDGE OVER SALUDA RIVER NEAR PELZER S.C.
1-S.T.D. Riveted Truss Span 148'6" c to c.

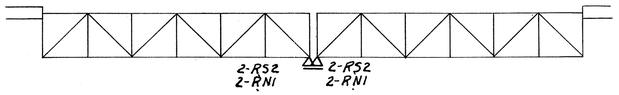
Scale:- 1" = 1'-0"

EDGE MOOR
EDGE MOOR
C.E. SEARLES
Wm. B.
B.R. 7-18-11

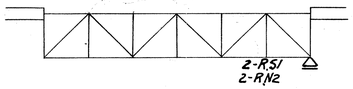
D1505, D1507, D1512 7



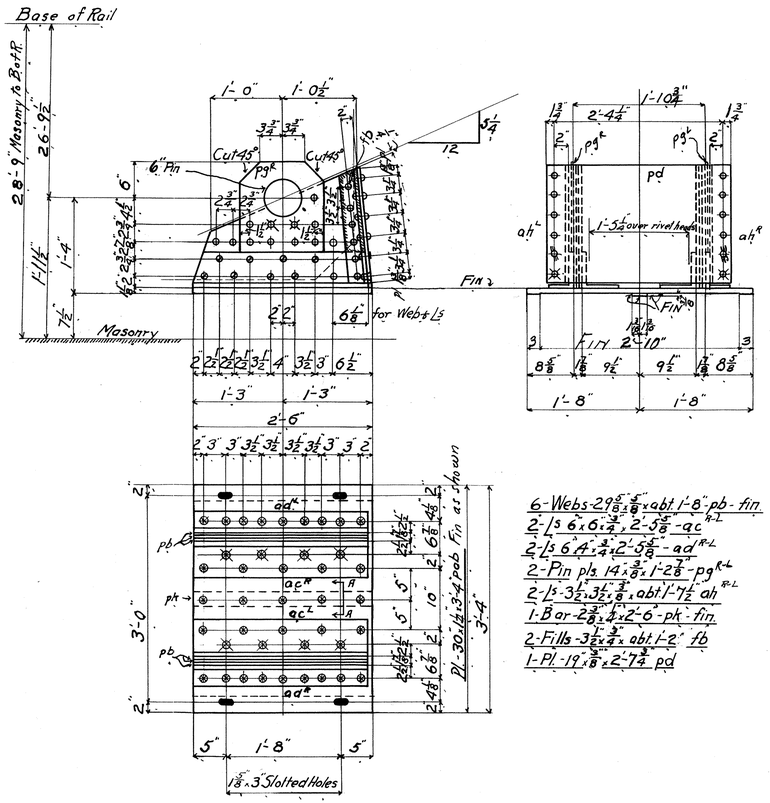
D1507



D1505

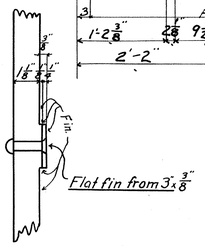


D1512

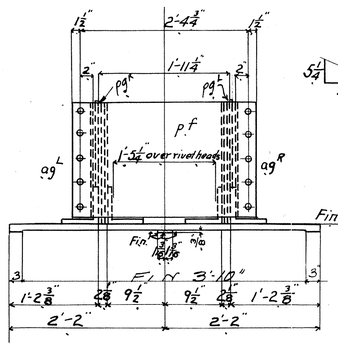


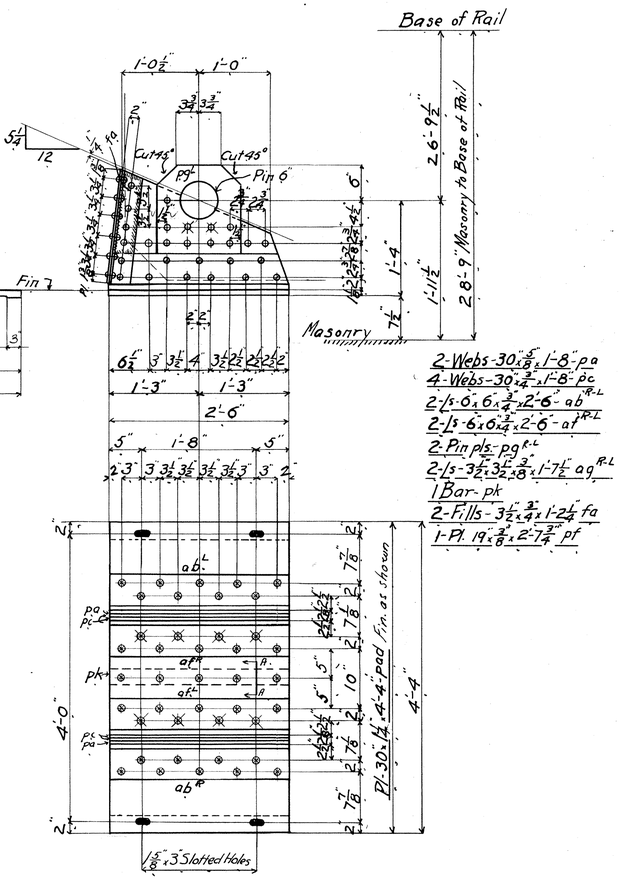
RS2

6-Webs-29 5/8" x 5/8" x abt 1'-8" - pb - fin
2-Ls 6 x 6 x 3/4 - 2'-5 5/8" - ac R-L
2-Ls 6 x 6 x 3/4 x 2'-5 5/8" - ad R-L
2-Pin pls 14 x 3/8 x 1'-2 7/8" - pg R-L
2-Ls-3 1/2 x 3 1/2 x 3/8 x abt 1'-7 1/2" ah R-L
1-Bar or 2-8 3/4 x 1/4 x 2'-6" - pk - fin
2-Fills - 3 1/2 x 3/4 x abt 1'-2" - fb
1-Pl - 19 x 3/8 x 2'-7 3/4" pd



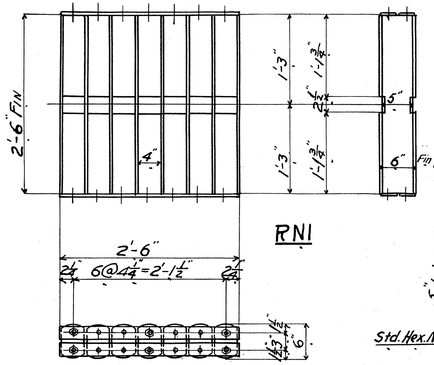
Section A-A





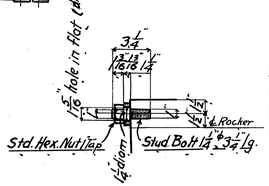
RS1

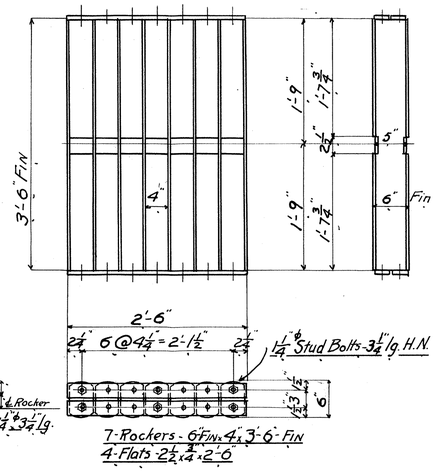
2-Webs-30 x 5/8 x 1'-8" - pa
4-Webs-30 x 1/4 x 1'-8" - pc
2-Ls-6 x 6 x 3/4 x 2'-6" - ab R-L
2-Ls-6 x 6 x 1/4 x 2'-6" - af R-L
2-Pin pls - pq R-L
2-Ls-3 1/2 x 3 1/2 x 3/8 x 1'-7 1/2" - ag R-L
1 Bar - pk
2-Fills - 3 1/2 x 3/4 x 1'-2 1/2" - fa
1-Pl. 19 x 3/8 x 2'-7 3/4" - pf



RN1

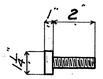
7-Rockers-6" Fin, 4, 2'-6" Fin
4-Flats-2 1/2" x 3/4" x 2'-6"





7-Rockers-6" Fin, 4, 3'-6" Fin
4-Flats-2 1/2" x 1/4" x 2'-6"

RN2



Stud Bolt 1 1/4" x 3" long

REQUIRED.				
NUMBER TO MAKE	SHIPPING MARK	ORDER D1505	ORDER D1507	ORDER D1512
2	RS1			2
10	RS2	4	6	
10	RN1	4	6	
2	RN2			2

Notes:—
- Material, Medium O.H. Steel.
- Rivets 7/8" diam.
- Open holes as noted.
- All holes punched full size except in material over 5/8" thick which are punched 3/4" and reamed to 15/16".
- For shop bill see page 58.

Exp. Shoes.

D1505 — Piedmont Traction Company
Bridge over South Fork of Catawba River
Near Lowell N.C.
2-S.T.D. Riveted Truss Spans 148'-6" c to c
2-S.T.D. Plate Girder Spans 80-8 o to o

D1507 — Piedmont Traction Company
Bridge over Catawba River
Mount Holly N.C.
3-S.T.D. Riveted Truss Spans 148'-6" c to c
2-S.T.D. Plate Girder Spans 60-0" long

D1512 — Greenville Spartanburg & Anderson Ry.
Bridge over Saluda River
Near Pelzer S.C.
1-S.T.D. Riveted Truss Span 148'-6" c to c

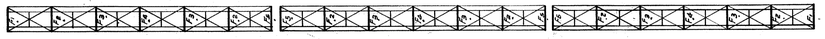
Scale 1" = 1'-0"

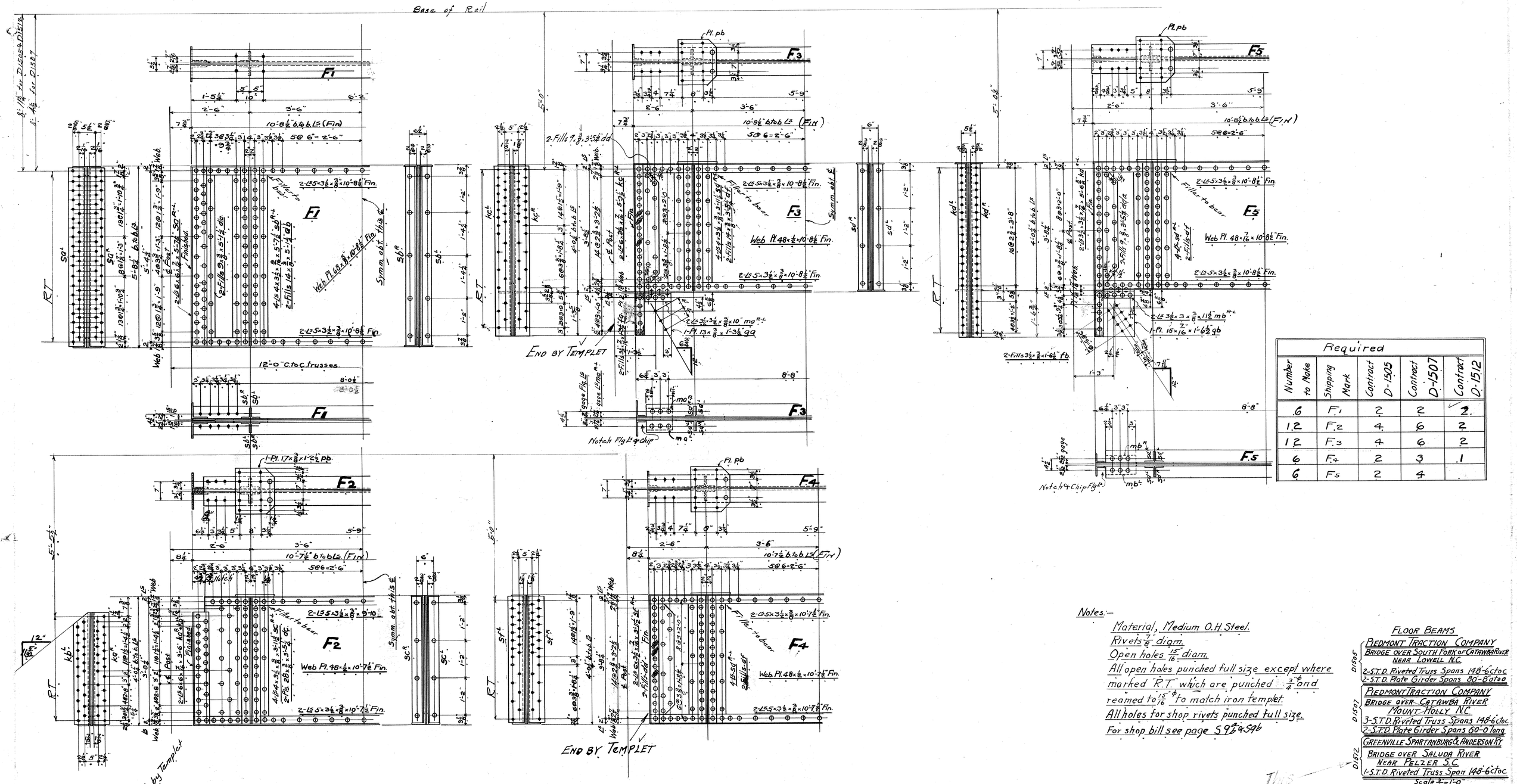
EDGE MOOR
EDGE MOOR
SEARLES
W.B. 7-5-11
B.R. 7-19-11

D1505
D1507
D1512

8

SFC 16.3 - 12





Required				
Number to Make	Shipping Mark	Contract D-1505	Contract D-1507	Contract D-1512
6	F1	2	2	2
12	F2	4	6	2
12	F3	4	6	2
6	F4	2	3	1
6	F5	2	4	

Notes.—

Material, Medium O.H. Steel.
Rivets 7/8" diam.
Open holes 15/16" diam.
All open holes punched full size except where marked "R.T." which are punched 3/4" and reamed to 15/16" to match iron templet.
All holes for shop rivets punched full size.
For shop bill see page 594–594b

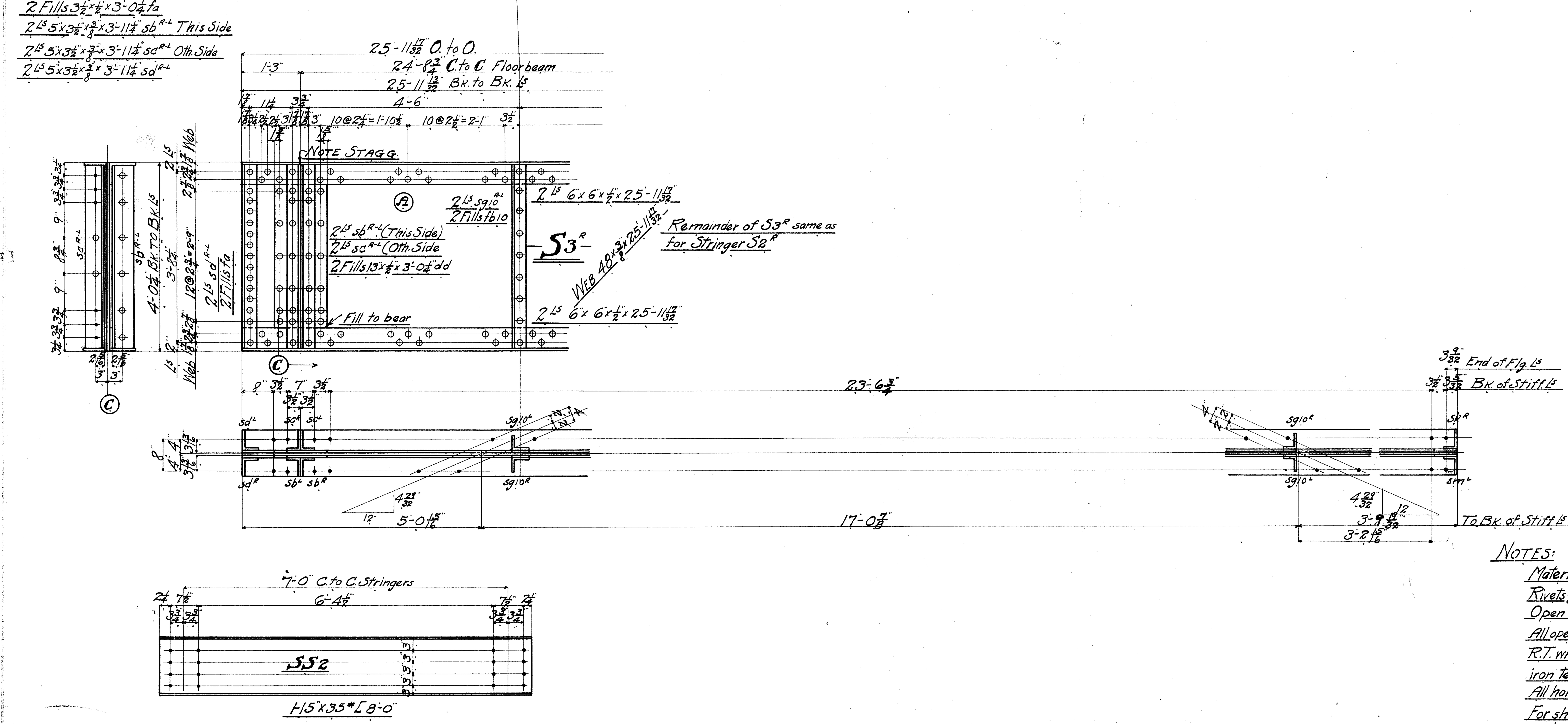
FLOOR BEAMS
PIEDMONT TRACTION COMPANY
D1505 BRIDGE OVER SOUTH FORK OF CATAWBA RIVER NEAR LOWELL N.C.
2-S.T.D. Riveted Truss Spans 148-6 ctoc
2-S.T.D. Plate Girder Spans 80-0 ctoc
PIEDMONT TRACTION COMPANY
D1507 BRIDGE OVER CATAWBA RIVER MOUNT HOLLY N.C.
3-S.T.D. Riveted Truss Spans 148-6 ctoc
2-S.T.D. Plate Girder Spans 60-0 long
GREENVILLE SPARTANBURG & ANDERSON RY
D1512 BRIDGE OVER SALUDA RIVER NEAR PELZER S.C.
1-S.T.D. Riveted Truss Span 148-6 ctoc
Scale 3/4" = 1'-0"

EDGE MOOR
EDGE MOOR
SEARLES
B.R. 6-9-11.
JST= 7-19-11.

Rev. 8-9-11

D-1505
D-1507
D-1512

PLATE NO. 9



REQUIRED					
Total Number	Description	Mark	D1505	D1507	D1512
6	Stringers	S2R	2	2	2
6	"	S2L	2	2	2
6	"	S3R	2	4	
6	"	S3L	2	4	
1	Stringer Strut	SS2			1
12	Diaphrams	DM2R	4	6	2
12	"	DM2L	4	6	2
36	"	DM1	12	18	6

Notes:

Material, Medium O.H. Steel.
Rivets 7/8" diam.
Open holes 15/16" diam.
All open holes punched full size except where marked R.T. which are punched 3/4" and reamed to 15/16" to match iron templet.
All holes for shop rivets punched full size.
For shop bill see page S10 a/b + S10b For D1505 + D1507 and page S10 For D1512

Stringers

D1505 — Peidmont Traction Company
Bridge over South Fork of Catawaba River near Lowell N.C.
2 S.T.D. Riveted Truss Spans 148'-6" c. to c.
2 S.T.D. Plate Girder Spans 80'-8" o. to o.

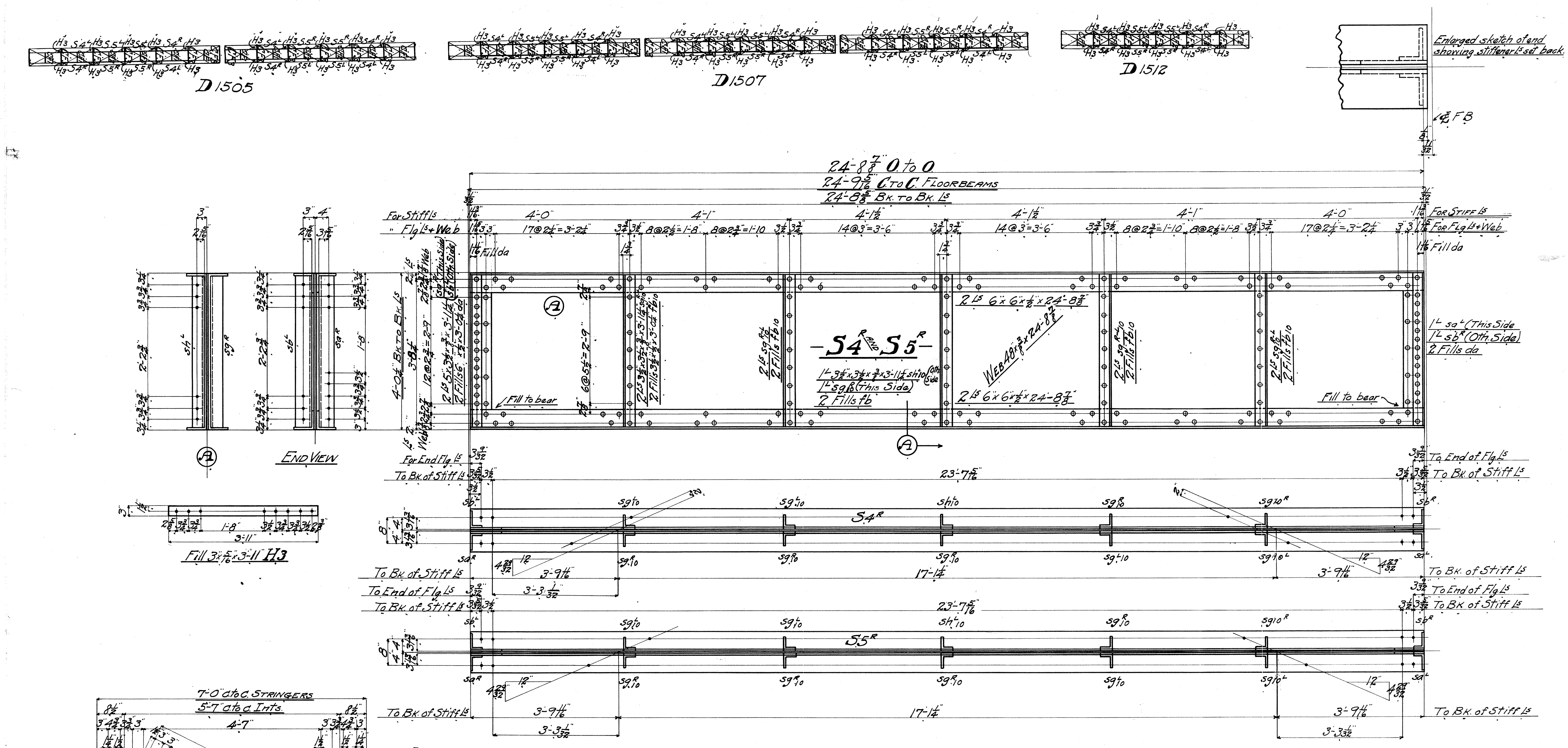
D1507 — Peidmont Traction Company
Bridge over Catawaba River
Mount Holly, N.C.
3 S.T.D. Riveted Truss Spans 148'-6" c. to c.
2 S.T.D. Plate Girder Spans 60'-0 long

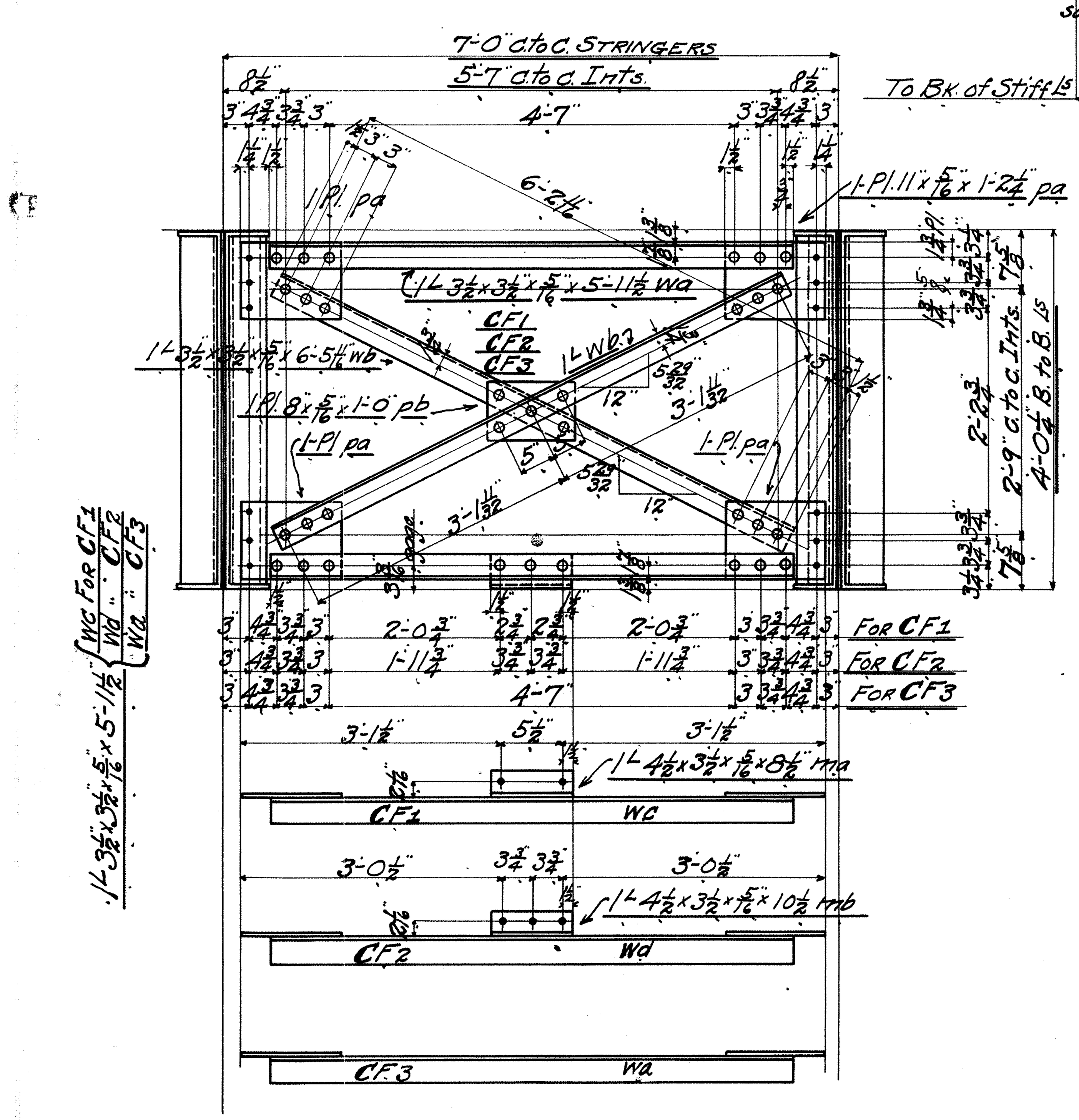
D1512 — Greenville, Spartanburg, Anderson Ry.
Bridge over Saluda River
Near Pelzer S.C.
1 S.T.D. Riveted Truss Span 148'-6" c. to c.
Scale 3/4" = 1'-0

This →

American Bridge Company.
Drawings made at Edge Moor Plant.
Work fabricated at Edge Moor Plant.
Searles
Drawn made by A.K. Date 8-12-11
Checked by B.R. Date 8-14-11
Order No. D1505 D1507 D1512
Sheet No. 10

SFC 16.3 - 14





Required For Order No D1505		
4	Stringers	S4R
4	"	S4L
4	"	S5R
4	"	S5L
8	Cross Frames	CF1
4	" "	CF2
12	" "	CF3
20	Fillers	H3

Required For Order No D1507		
6	Stringers	S4R
6	"	S4L
6	"	S5R
6	"	S5L
12	Cross Frames	CF1
6	" "	CF2
19	" "	CF3
30	Fillers	H3

Required For Order No D1512		
2	Stringers	S4R
2	"	S4L
2	"	S5R
2	"	S5L
4	Cross Frames	CF1
2	" "	CF2
5	" "	CF3
10	Fillers	H3

Notes:—
- Material, Medium O.H. Steel.
- Rivets 7/8" diam.
- Open holes 15/16" diam.
- All holes punched full size.
- For shop bill see page S11.

Stringers

D1505 — Piedmont Traction Company
Bridge over South Fork of Catawba River
Near Lowell N.C.
2-S.T.D. Riveted Truss Spans 148'-6" c to c
2-S.T.D. Plate Girder Spans 80'-8" o to o

D1507 — Piedmont Traction Company
Bridge over Catawba River
Mount Holly N.C.
3-S.T.D. Riveted Truss Spans 148'-6" c to c
2-S.T.D. Plate Girder Spans 60'-0" long

D1512 — Greenville Spartanbug & Anderson Ry.
Bridge over Saluda River
Near Pelzer S.C.
1-S.T.D. Riveted Truss Span 148'-6" c to c

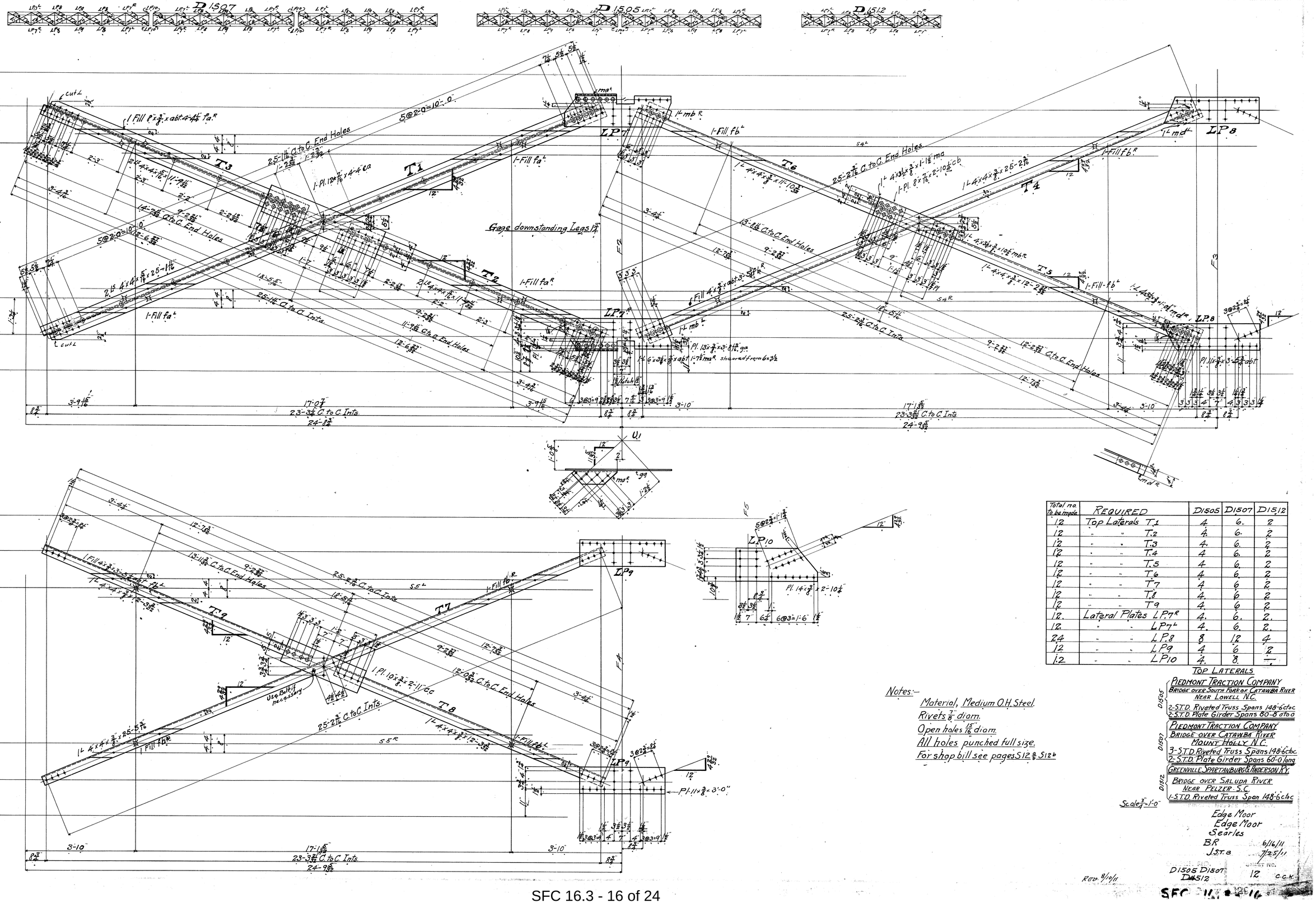
Scale 3/4" = 1'-0"

Edge Moor
Edge Moor
Searles
A.K. 6/28/11
B.R. 7-14-11

Rev 8/10/11

D1505 D1507
D1512
11
C.C.K.

SFC 16.3 - 15 of 24



Total no. to be made	REQUIRED		D1505	D1507	D1512
12	Top Laterals	T1	4	6	2
12	" "	T2	4	6	2
12	" "	T3	4	6	2
12	" "	T4	4	6	2
12	" "	T5	4	6	2
12	" "	T6	4	6	2
12	" "	T7	4	6	2
12	" "	T8	4	6	2
12	" "	T9	4	6	2
12	Lateral Plates	LP7R	4	6	2
12	" "	LP7L	4	6	2
24	" "	LP8	8	12	4
12	" "	LP9	4	6	2
12	" "	LP10	4	8	—

TOP LATERALS

D1505 — PIEDMONT TRACTION COMPANY
BRIDGE OVER SOUTH FORK OF CATAWBA RIVER NEAR LOWELL N.C.
2-S.T.D. Riveted Truss Spans 148'-6" c to c
2-S.T.D. Plate Girder Spans 80'-8" o to o

D1507 — PIEDMONT TRACTION COMPANY
BRIDGE OVER CATAWBA RIVER MOUNT HOLLY N.C.
3-S.T.D. Riveted Truss Spans 148'-6" c to c
2-S.T.D. Plate Girder Spans 60'-0" long

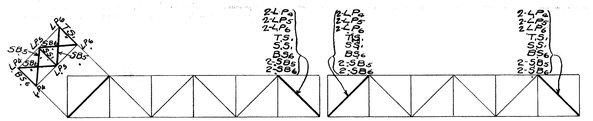
D1512 — GREENVILLE, SPARTANBURG & ANDERSON RY.
BRIDGE OVER SALUDA RIVER NEAR PELZER S.C.
1-S.T.D. Riveted Truss Span 148'-6" c to c

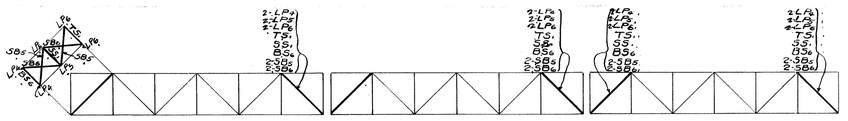
Notes:—
Material, Medium O.H. Steel.
Rivets 7/8" diam.
Open holes 15/16" diam.
All holes punched full size.
For shop bill see pages S12 & S12b

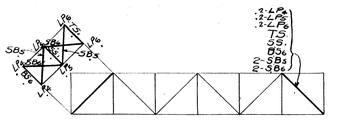
Edge Moor
Edge Moor
Searles
BR 6/16/11
J.S.T.B. 7/25/11

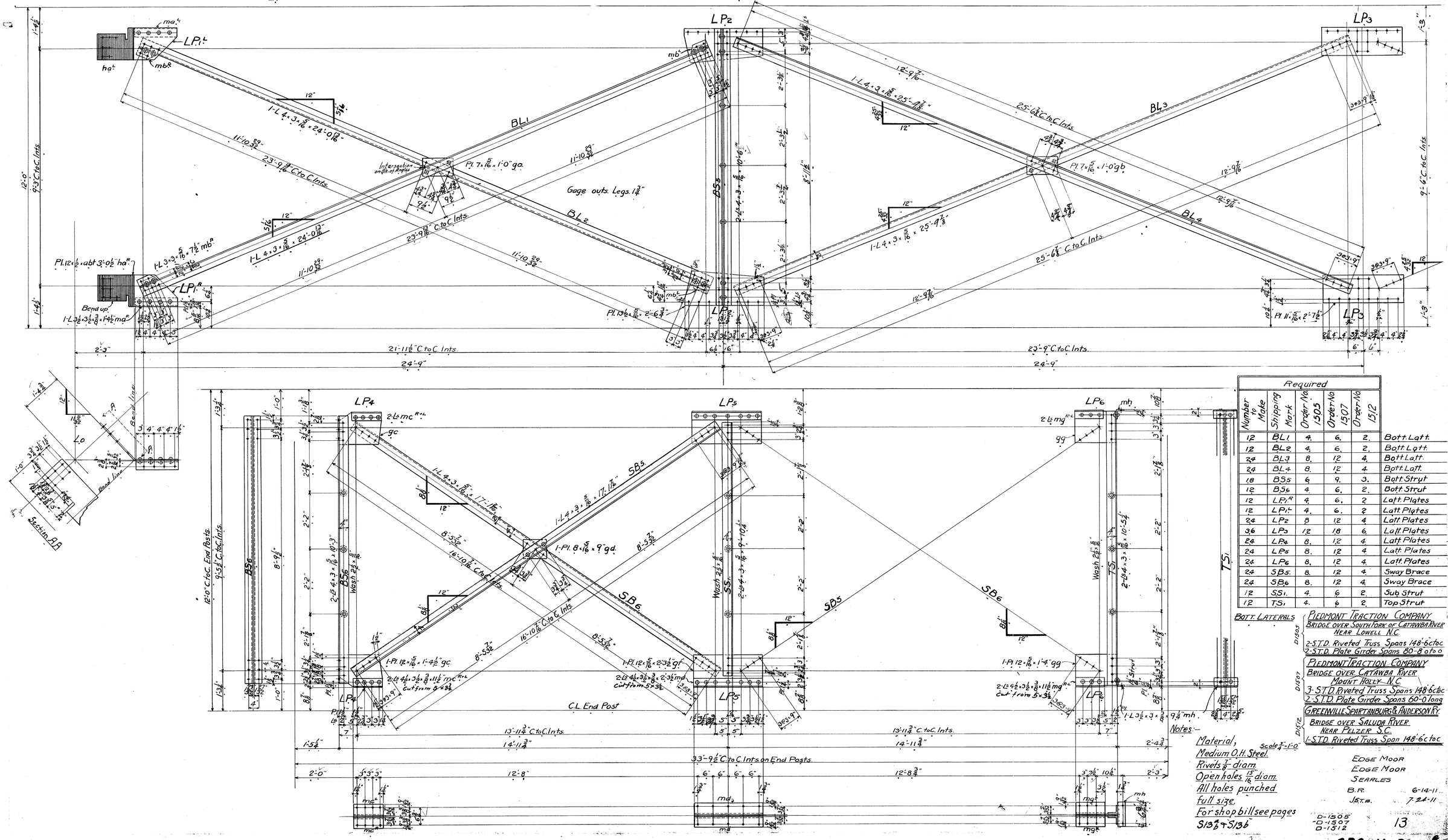
DRAWING NO. D1505 D1507 D1512 12 C.C.K.

REV. 8/10/11









Required					
Number to Make	Shipping Mark	Order No. 1505	Order No. 1507	Order No. 1512	
12	BL1	4.	6.	2.	Bott. Latt.
12	BL2	4.	6.	2.	Bott. Latt.
24	BL3	8.	12	4.	Bott. Latt.
24	BL4	8.	12	4.	Bott. Latt.
18	B55	6.	9.	3.	Bott. Strut
12	B56	4.	6.	2.	Bott. Strut
12	LP1R	4.	6.	2	Latt. Plates
12	LP1L	4.	6.	2	Latt. Plates
24	LP2	8	12	4	Latt. Plates
36	LP3	12	18	6	Latt. Plates
24	LP4	8.	12	4	Latt. Plates
24	LP5	8.	12	4	Latt. Plates
24	LP6	8.	12	4	Latt. Plates
24	SB5	8.	12	4	Sway Brace
24	SB6	8.	12	4	Sway Brace
12	SS1	4.	6	2.	Sub Strut
12	TS1	4.	6	2.	Top Strut

Bott. Laterals

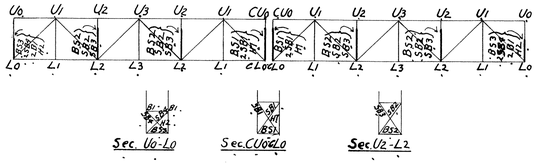
PIEDMONT TRACTION COMPANY
BRIDGE OVER SOUTH FORK OF CATAWBA RIVER NEAR LOWELL N.C.
D1505 2-S.T.D. Riveted Truss Spans 148'-6 c to c
2-S.T.D. Plate Girder Spans 80'-8 c to c

PIEDMONT TRACTION COMPANY
BRIDGE OVER CATAWBA RIVER MOUNT HOLLY N.C.
D1507 3-S.T.D. Riveted Truss Spans 148'-6 c to c
2-S.T.D. Plate Girder Spans 60'-0 long

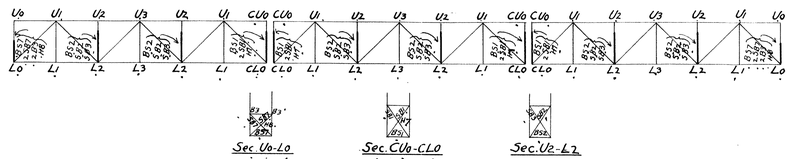
GREENVILLE SPARTANBURG & ANDERSON RY.
BRIDGE OVER SALUDA RIVER NEAR PELZER S.C.
D1512 1-S.T.D. Riveted Truss Span 148'-6 c to c

Notes:-
Material, Medium O.H. Steel.
Rivets ⅞" diam.
Open holes 15/16" diam.
All holes punched full size.
For shop bill see pages S13½ & S136

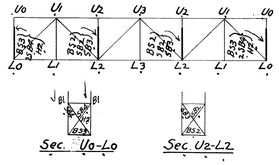
Scale ¾"=1'-0"



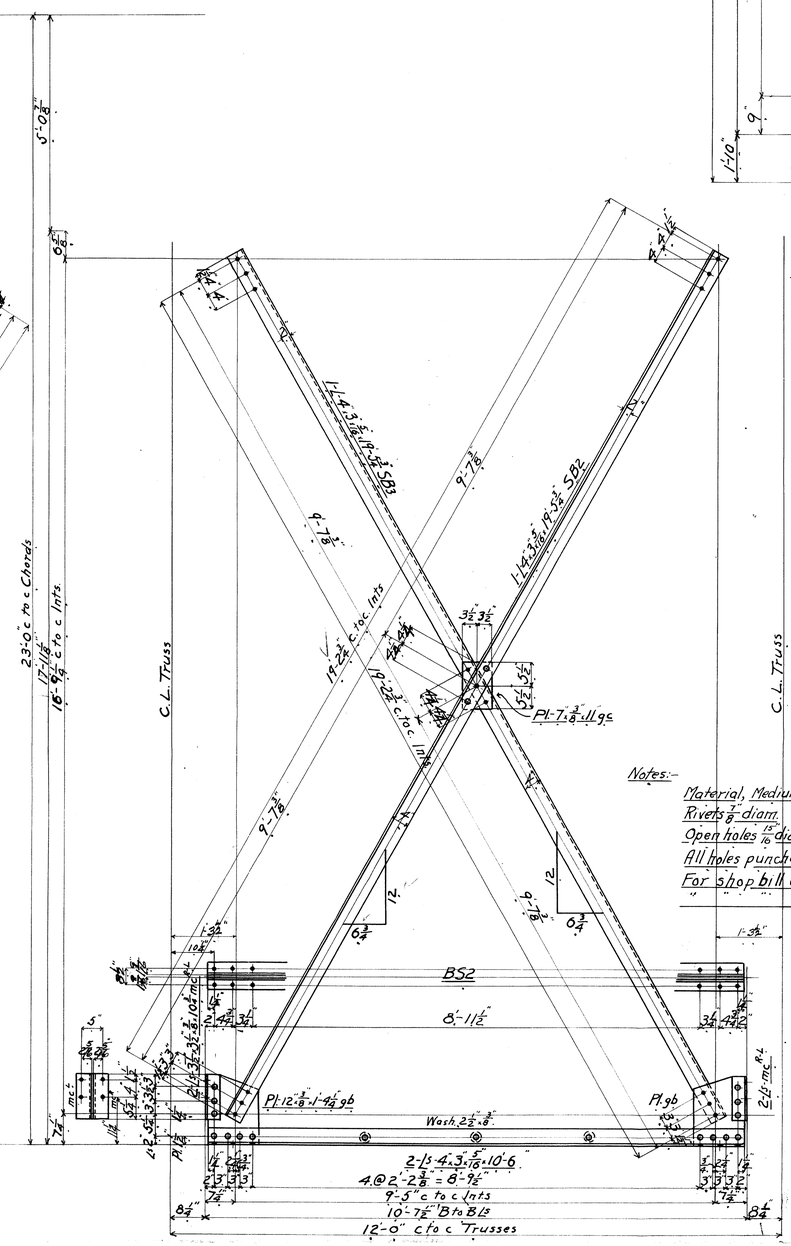
D1505

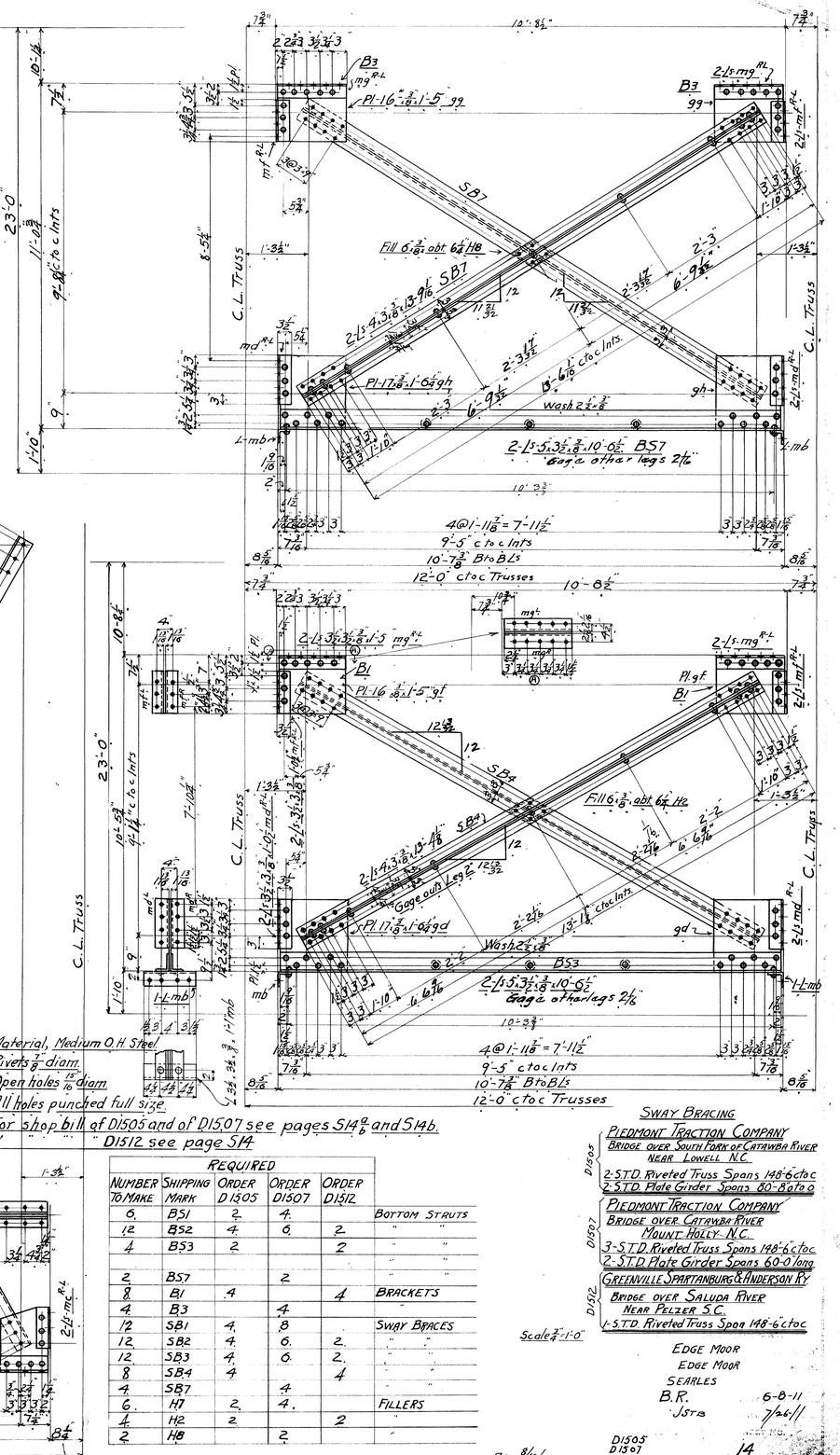


D1507



D1512





Notes:-

Material, Medium O.H. Steel
Rivets ⅞" diam.
Open holes 15/16" diam.
All holes punched full size.
For shop bill of D1505 and of D1507 see pages S14a and S14b.
" " " " D1512 see page S14

REQUIRED

Number To Make	Shipping Mark	Order D1505	Order D1507	Order D1512	
6	BS1	2	4		Bottom Struts
12	BS2	4	6	2	" "
4	BS3	2		2	" "
2	BS7		2		" "
8	B1	4		4	Brackets
4	B3		4		"
12	SB1	4	8		Sway Braces
12	SB2	4	6	2	" "
12	SB3	4	6	2	" "
8	SB4	4		4	" "
4	SB7		4		" "
6	H1	2	4		Fillers
4	H2	2		2	"
2	H8		2		"

Rev 8/16/11

Sway Bracing

D1505 — Piedmont Traction Company
Bridge over South Fork of Catawba River
Near Lowell N.C.
2-S.T.D. Riveted Truss Spans 148'-6" c to c
2-S.T.D. Plate Girder Spans 80'-8" a to o

D1507 — Piedmont Traction Company
Bridge over Catawba River
Mount Holly N.C.
3-S.T.D. Riveted Truss Spans 148'-6" c to c.
2-S.T.D. Plate Girder Spans 60'-0" long

D1512 — Greenville Spartanburg & Anderson Ry
Bridge over Saluda River
Near Pelzer S.C.
1-S.T.D. Riveted Truss Span 148'-6" c to c

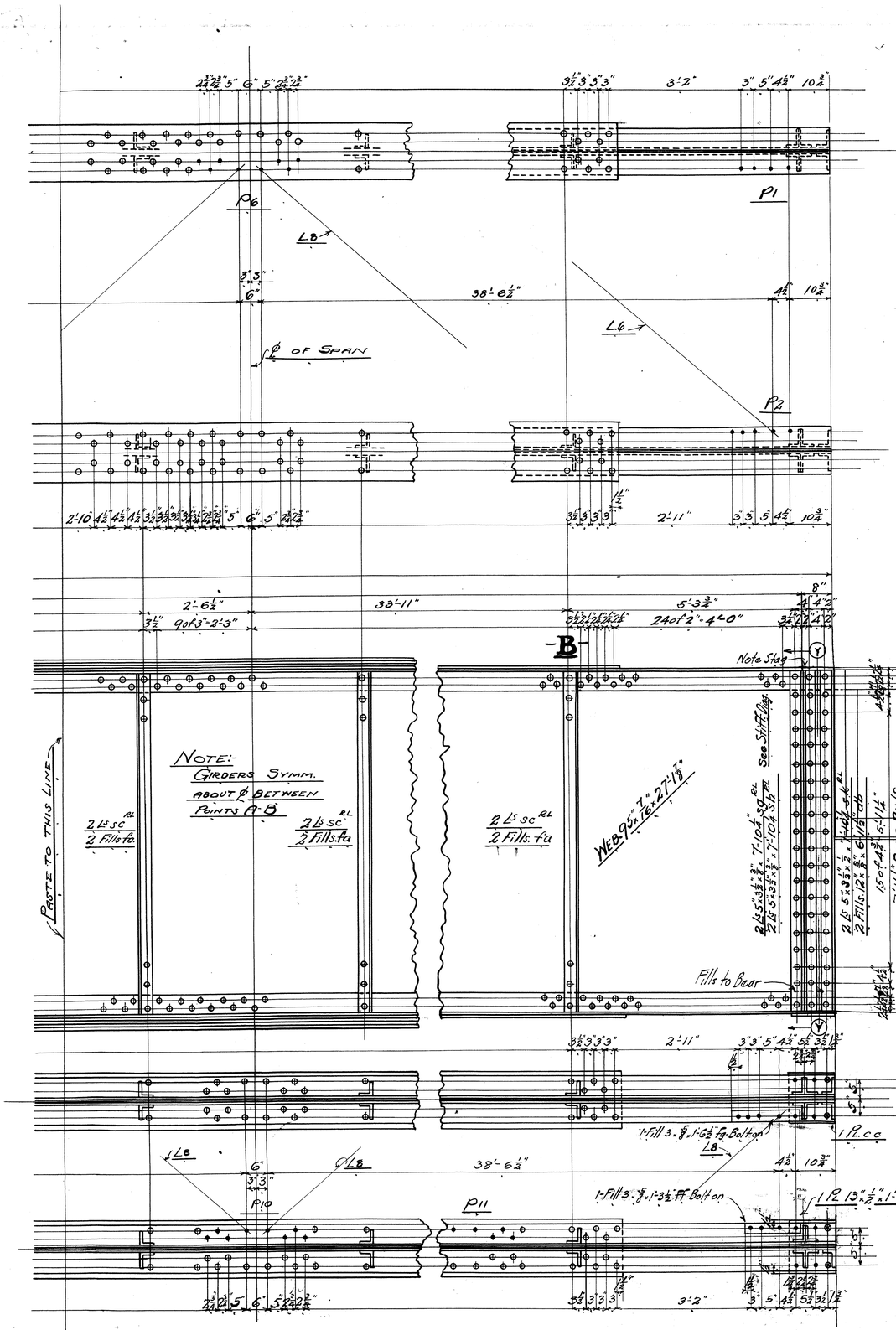
Scale ¾"=1'-0"

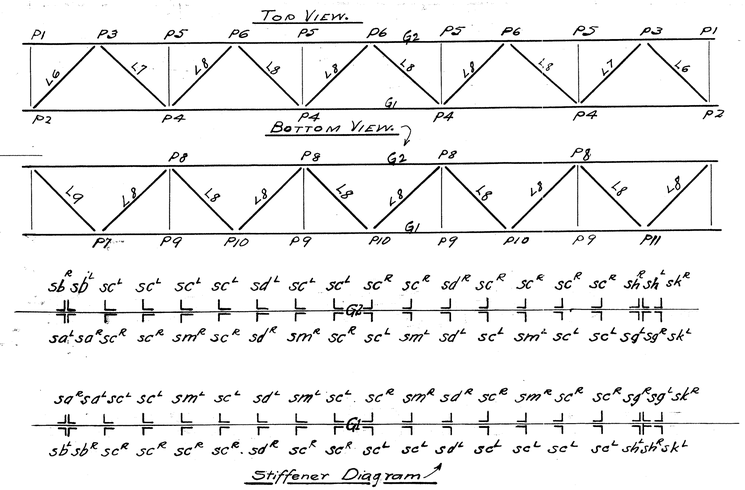
EDGE MOOR
EDGE MOOR
SEARLES
B.R. 6-8-11
J.S.T.B. 7/26/11

D1505
D1507
D1512

14

NOTE RIVET STAGGER IN THIS VIEW
7'-0" c to c Girders
6'-2" c to c Int
G2
G1
1 Pl. 12 x 3/8 x 1'-3 1/2" P1
1 Pl. 12 x 3/8 x 1'-6 1/2" P2
1 Pl. 15 x 3/8 x 2'-8" P3
1 Pl. 14 x 3/8 x 1'-1 1/2" P5
1 Pl. 14 x 3/8 x 2'-6" P6
1 Pl. 14 x 3/8 x 2'-11 1/2" P4
Notch for Pl. P4
80'-8" Out to Out Girders
78'-9 1/2" c. to c. Bearings
Note Stag
G1 & 2
Web Pl. 95 x 7/16 x 27'-8 3/8"
Web Pl. 95 x 7/16 x 25'-9 1/2"
2 Ls 6 x 6 x 5/8 x 80'-8"
2 Ls 6 x 6 x 5/8 x 80'-8"
AB Co's Sta Name Pl. For This Side of Girder G1 Only
1 Fill to Bear
Cut on this line
1 Pl. cb
1 Pl. 13 x 3/4 x 1'-2" cb
1 Pl. 14 x 5/16 x 2'-8" P7
1 Pl. 14 x 5/16 x 2'-11 1/2" P8
Notch like P4
1 Pl. 14 x 5/16 x 1'-1 1/2" P9
1 Pl. 14 x 5/16 x 2'-6" P10
Remainder of Spacing Same as Top View
Girders 80'-8"
ORDER No. D1585 SHEET No. 15A Drawing by AK 6-2-11 Checked by BR 7-26-11





REQUIRED		
2	GIRDERS	G1
2	"	G2
4	LATERALS	L6
4	"	L7
30	"	L8
2	"	L9
4	LATERAL PLATES	P1
4	" "	P2
4	" "	P3
8	" "	P4
8	" "	P5
6	" "	P6
2	" "	P7
8	" "	P8
8	" "	P9
6	" "	P10
2	" "	P11

Notes:-

Material, Medium O.H. Steel.
Rivets ⅞ diam.
Open holes 15/16 diam.
All open holes punched full size except where marked "R.T." which are punched ¾ and reamed to 15/16 to match iron templet.
All holes for shop rivets punched full size.
For shopbill see page 15a to 15b.

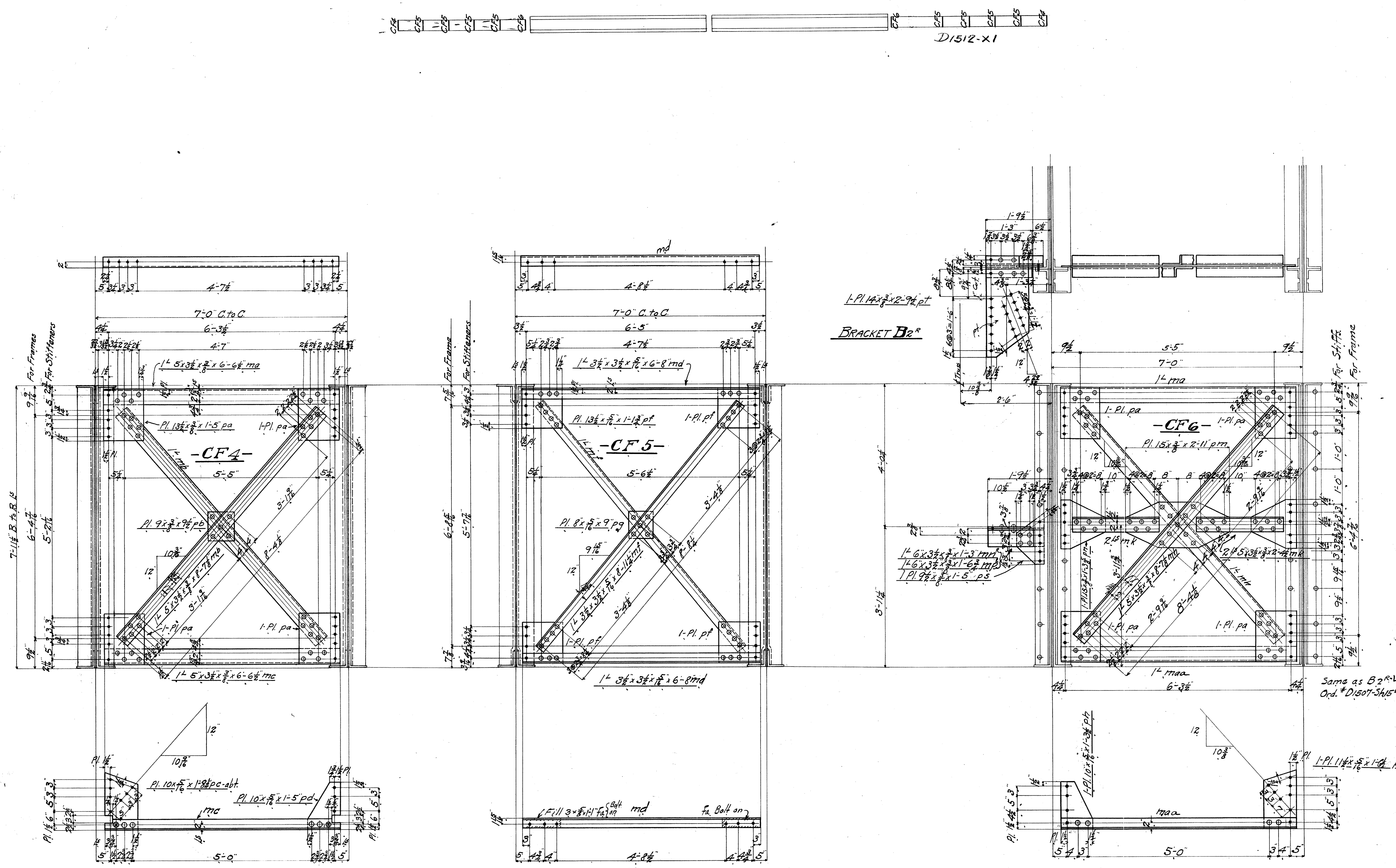
GIRDERS
PIEDMONT TRACTION COMPANY
BRIDGE OVER SOUTH FORK OF CATAWBA RIVER
NEAR LOWELL N.C.
2-S.T.D. Riveted Truss Spans 148-6 c to c
2-S.T.D. Plate Girder Spans 80'-8 c to c
Scale ⅜"=1'-0"

EDGE MOOR
EDGE MOOR
C.E. Searles
A.K. 62-11
B.R. 7-27-11

Rev 11/4/12

D1505 15B

SFC 16.3-20



END FRAME 80'-0" SPAN

ABUTMENT END

INT. FRAME 80'-0" SPAN

END FRAME 80'-0" SPAN.

TRUSS END.

REQUIRED		
2	CROSS FRAMES	CF4
8	" "	CF5
2	" "	CF6
2	BRACKETS	B2R
2	"	B2L

Same as B2R-L Ord. #D1507-Sh.15B

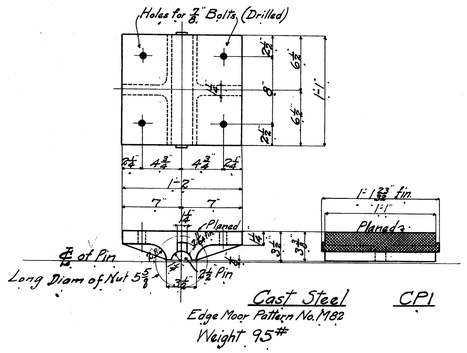
Notes:-
- Material, Medium O.H. Steel.
- Rivets $\frac{7}{8}$" diam.
- Open holes $\frac{15}{16}$" diam.
- All holes punched full size.
- For shop bill see page S16.

BRACE FRAMES
PIEDMONT TRACTION COMPANY
BRIDGE OVER SOUTH FORK OF CATAWBA RIVER
NEAR LOWELL N.C.
2-S.T.D. Riveted Truss Spans 148'-6" c to c
2-S.T.D. Plate Girder Spans 80'-8" o to o
Scale $\frac{3}{4}$" = 1'-0"

Edge Moor
Edge Moor
Searles
A.K. + B.R. 6/28/11.
B.R. 7-28-11

D1505 16

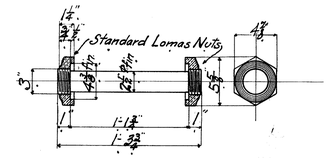
SF2G 16.3-21



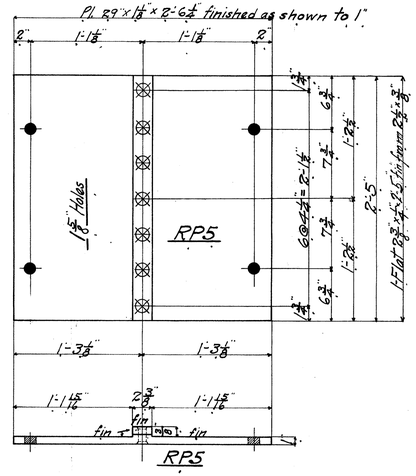
Cast Steel CP1

Edge Moor Pattern No. M82

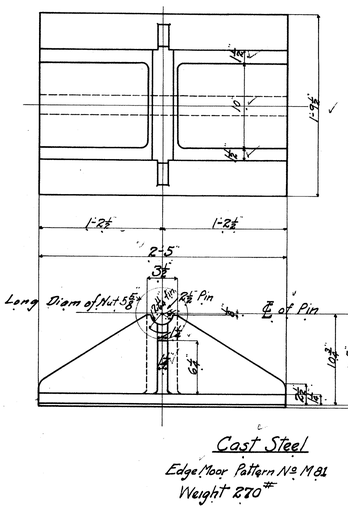
Weight 95#

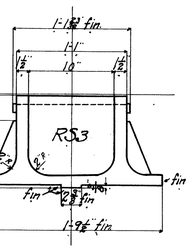


PP1



RP5

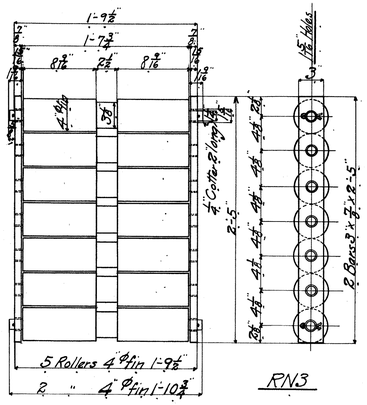




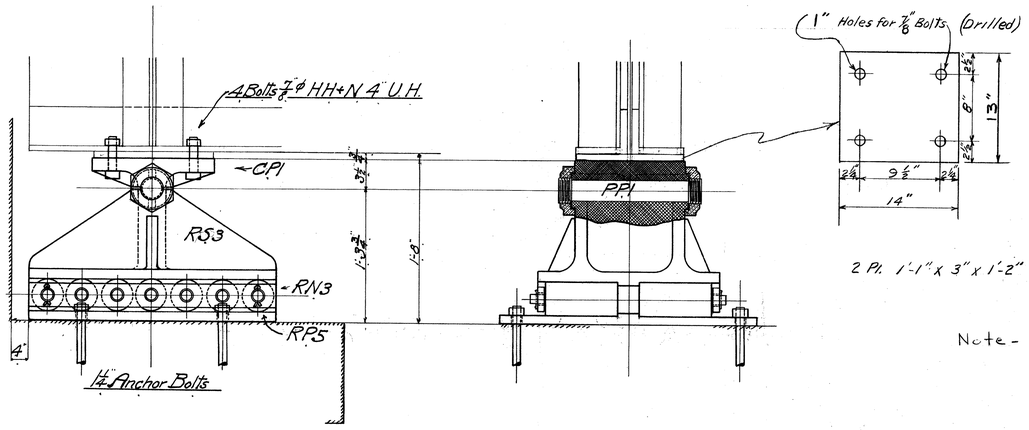
Cast Steel

Edge Moor Pattern No. M81

Weight 270#



RN3



1 1/4" Anchor Bolts

2 Pl. 1'-1" x 3" x 1'-2"

Material medium O.H. Steel except as noted.
Rivets 7/8" diam.
Open holes as noted.
Shop bill page 517.

REQUIRED		
4	Roller Shoes (M81)	RS3
4	Cap Plates (M82)	CP1
4	Roller Nests	RN3
4	Roller Plates	RP5
4	Pins	PP1

Note - Shim Plates Placed June 24 And 25, 1963.
See Dwg. D-1505, Sheet E1

Rev. 3-5-63 - Shim Plates Added

— CAST SHOES —

PIEDMONT TRACTION COMPANY

BRIDGE OVER SOUTH FORK OF CATAWBA RIVER NEAR LOWELL N.C.

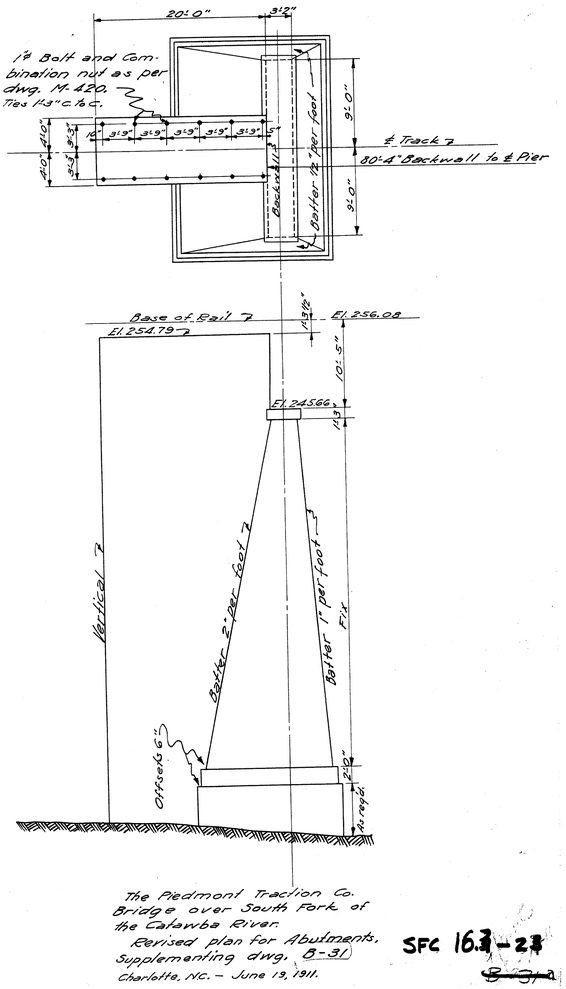
2 S.T.D. Riveted Truss Spans 148'-6" c to c
2 S.T.D. Plate Girder Spans 80'-8" c to c

Scale 1/8" = 1'-0"

AMERICAN BRIDGE COMPANY

DRAWING MADE AT Edge Moor
WORK EXECUTED AT Edge Moor
IN CHARGE OF Searles
DRAWN MADE BY C.C.K. DATE 7/3/11
TRACED BY J.S.T.B. DATE 7/4/11
ORDER NO. D-1505
SHEET NO. 17

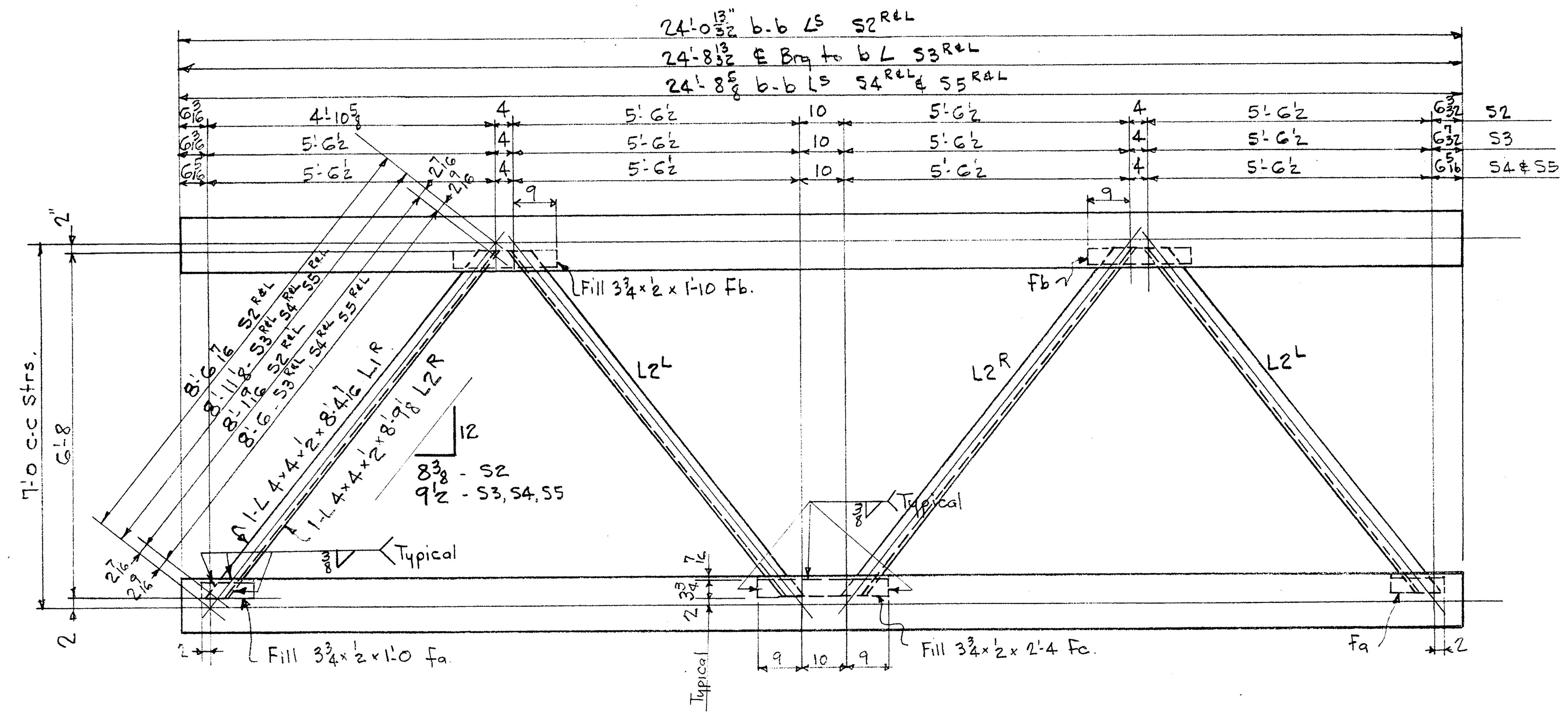
SFC 16.3 - 22



The Piedmont Traction Co.
Bridge over South Fork of the Catawba River.
Revised plan for Abutments, Supplementing dwg. B-31
Charlotte, N.C. – June 13, 1911.

SFC 16.3 - 23

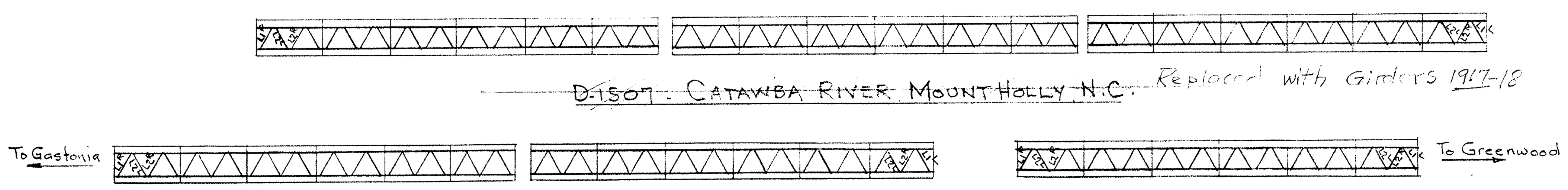
2 Sepias



DETAIL of STRINGER BRACING

Bill of Material				
Mark	Catawba River	South Fork	Saluda River	Total
L1^R	1	1	1	1
L1^L	1	1	1	1
L2^R	34	23	11	23
L2^L	34	23	11	23
Fa	36	24	12	24
Fb	36	24	12	24
Fc	18	12	6	12

Material - A36 Steel
No paint.
Specs. - AREA
Welding to AWS.



~~D-1507 . Catawba River Mount Holly N.C.~~ Replaced with Girders 1917-18

D-1505 South Fork Catawba Lowell N.C

D-1512 . Saluda River , Pelzer, N.C

Note. All bracing not noted is L2 R or L

Piedmont and Nothern Railway Co
Charlotte, N.C.
Details for Bracing Stringers
In Truss Spans at
~~Catawba River~~ ~~Mount Holly, N.C.~~
South Fork Catawba Lowell N.C
~~Saluda River~~ ~~Pelzer S.C~~
Scale ½" = 1' 5/23/65 EWC

~~P. & N. Ry. Drwg. B-364~~ SFC 16.3-24