

ERECTION DIAGRAM - SPANS #4E, #5E, & #6E

**STRUCTURAL STEEL NOTES**

**Fabrication** - Michigan State Highway Department Standard Specifications for Road & Bridge Construction - 1960 Edition.  
**Design** - M.S.H.D. Standard Specifications for Design of Highway Bridges - 1958 Edition. H20-S16-44 Loading & Alternate Military Loading.  
**Shop Connections** - All Shop Connections shall be Riveted or Welded as shown on Plans.  
**Field Connections** - High Strength Bolts in Girder Connections in Spans #13E, #14E & #15E. 3/4" φ Rivets elsewhere except as noted.  
**Rivets** - 3/4" φ Rivets throughout except in Spans #13E, #14E & #15E. In Spans #13E, #14E & #15E use High Strength Bolts in R Girders & 3/4" φ Rivets in all Diaphragm, Bracing & Miscellaneous Connections.  
**Open Holes** - 3/16" φ throughout, except in Spans #13E, #14E & #15E unless otherwise noted. In Spans #13E, #14E & #15E - 1/8" φ in R Girders & 1/16" φ elsewhere unless noted.  
**Sole Plates** - Sole Plates 3" or more in thickness may be built up by Welding Together Plates of not more than 1 1/2" in thickness. Edges shall be beveled 1/4" & welded with a continuous weld for the full perimeter. Welds shall be ground flush with faces of Plates.  
**Shop Paint** - In addition to the Shop Paint Provisions of the Standard Specifications, the top surface of Masonry Plates in Rolled-Beam Spans, the curved surface of Rockers, and the surfaces of all Masonry Plates in contact with Rockers shall be coated in accordance with the requirements for Machined Surfaces. The upper surfaces of the Top Flanges of all Rolled Beams, except those in Span #36E & the upper surfaces of the Top Cover Plates of the Fascia Girders in Spans #11E & #12E shall be given one coat of Linseed Oil only. Metal Floor joints shall not be painted in the shop except as noted in.  
**Field Paint** - Parts of structure which will be inaccessible for painting after erection shall be field painted before erection. Field Painting shall consist of one complete coat of Painting Mixture 2A & one complete coat of Painting Mixture 5B.  
**Welding** - All Welding shall be in accordance with American Welding Society Specifications.  
**Splices** - Splices shall be completely assembled in the shop, Reamed & Match Marked.  
**Camber** - Camber shall be as noted. Camber shall be measured with Beams & Girders laying on their sides. Beams not marked for Camber will have Mill Camber-Up, except Spans #4E & #5E which will have Mill Camber Down.

**Spiral Shear Developers** - To be used with all Rolled Beams except those in Span #36E & with Fascia Girders in Spans #11E & #12E. Spiral Shear Developer Shown on Sheet #  
**Structural Steel Materials** - Beams with Cover Plates & the Cover Plates shall be A.S.T.M. A373. All other Steel shall be A.S.T.M. A7.  
**Wrought Iron** - Where Wrought Iron materials are called for on the Plans, corrosion resistance low alloy materials such as "Corten", "Mayari R", "Yaloy" & "Hi-Steel", may be used.  
**Quantities**  
 Structural Steel A373 \_\_\_\_\_  
 " " A7 \_\_\_\_\_  
 Bronze Plates \_\_\_\_\_  
 Wrought Iron - (Drainage Assemblies, Fittings & Downspouts) \_\_\_\_\_  
 Structural Steel - Furnishing & Fabricating \_\_\_\_\_  
 " " - Erection \_\_\_\_\_  
 Shear Developers \_\_\_\_\_  
 Field Painting \_\_\_\_\_

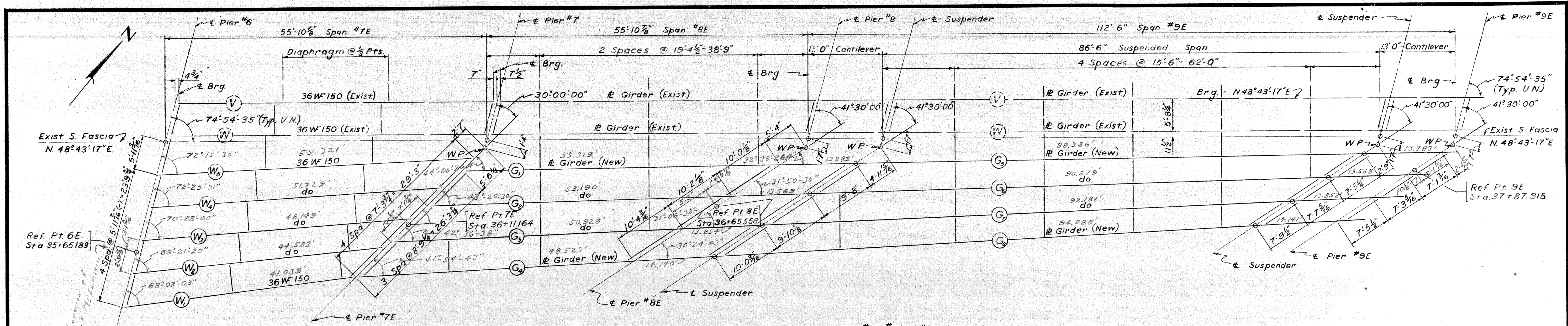
Lump Sum  
Lump Sum

*Part tie dimensions from Ref. Pt. 6E  
at ca. pier as on final framing plans  
I give to me for each pier  
we need these right now  
for other work*

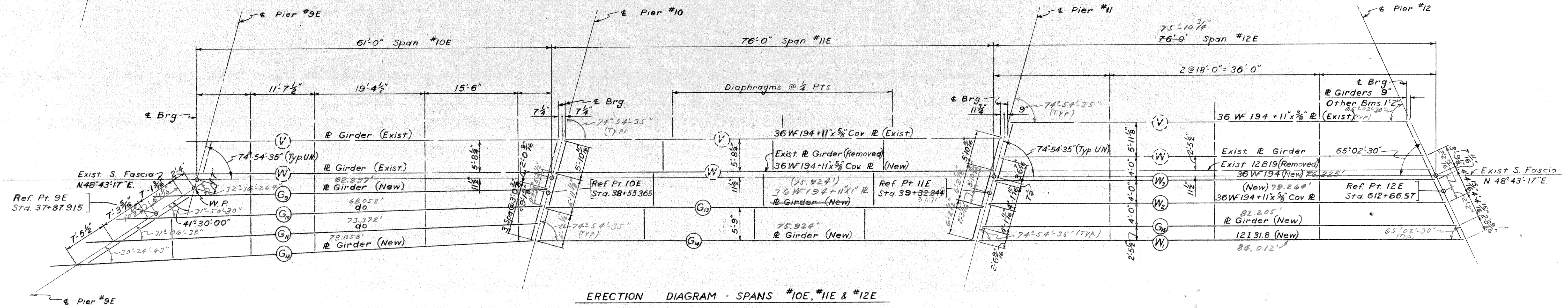
**MICHIGAN STATE HIGHWAY DEPARTMENT**

REVISIONS			
NO.	DESCRIPTION	DATE	BY

SQUAD BOSS		
DRAWN BY	V.B. Jackson	9-61
TRACED BY	V.B. Jackson	9-61
CHECKED BY	R. Harris	10-61
SHEET	OF	



ERECTION DIAGRAM - SPANS #7E, #8E & #9E



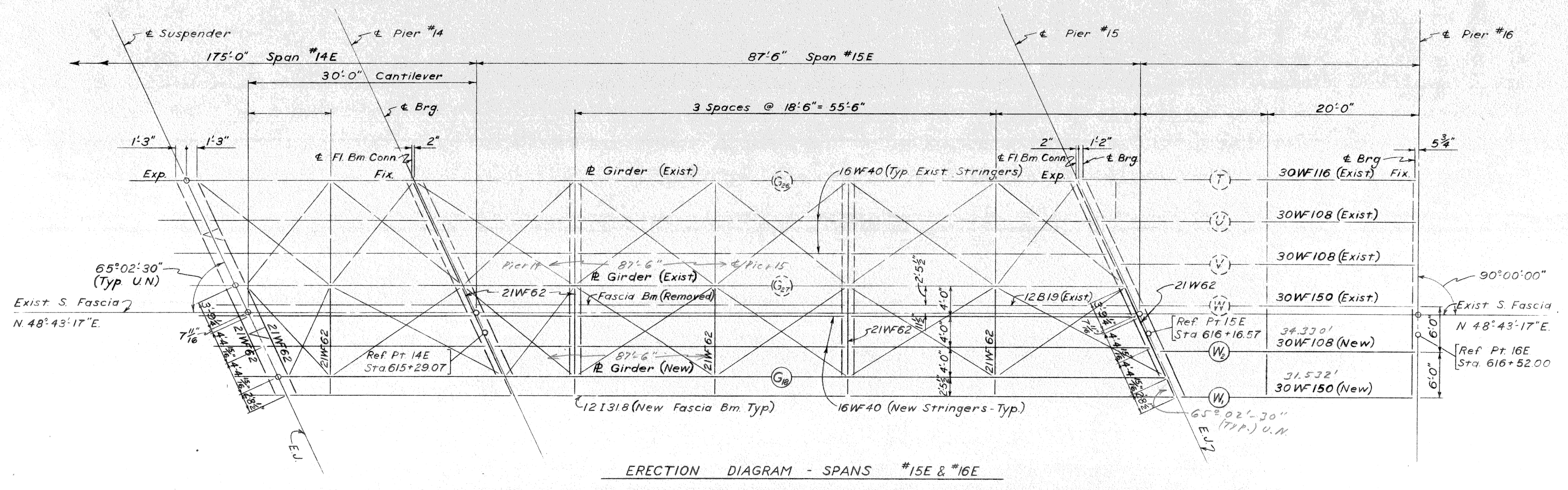
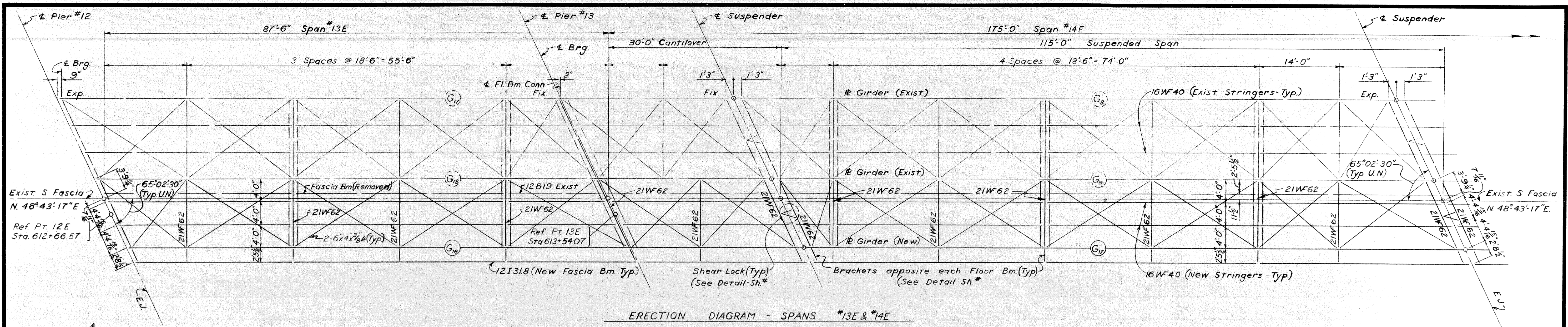
ERECTION DIAGRAM - SPANS #10E, #11E & #12E

All Beam Dimensions are from C.C. Piers

MICHIGAN STATE HIGHWAY DEPARTMENT

REVISIONS			
NO.	DESCRIPTION	DATE	BY

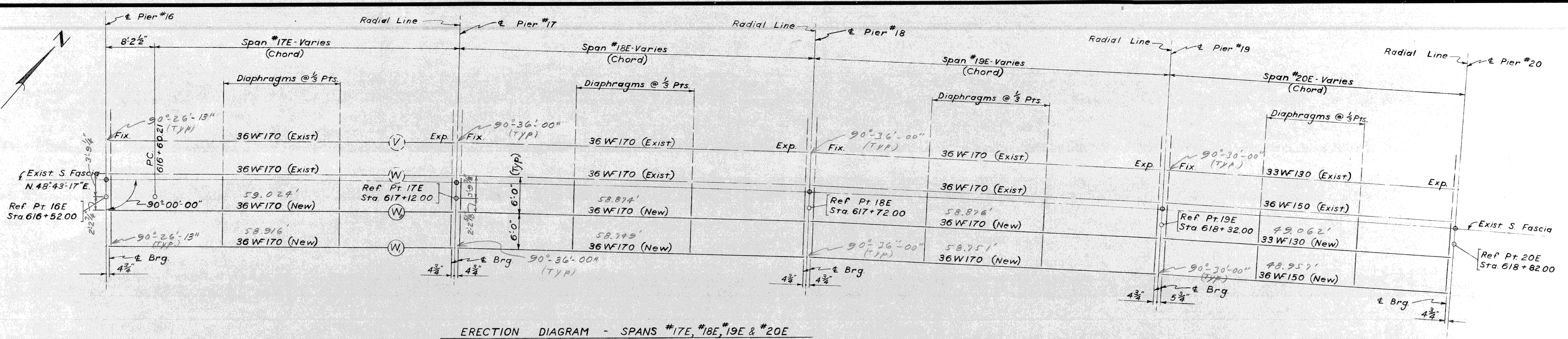
SQUAD BOSS	
DRAWN BY	L. Blackson 9-61
TRACED BY	L. Blackson 9-61
CHECKED BY	E. Morris 10-61
SHEET	OF



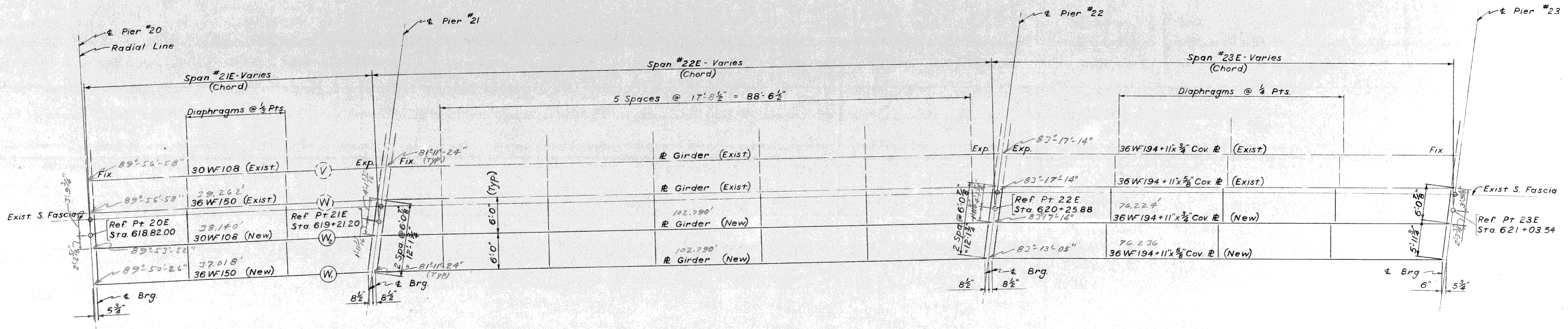
REVISIONS			
NO.	DESCRIPTION	DATE	BY

SQUAD BOSS	DRAWN BY	DATE	BY
	L. B. Jackson	10-61	
	TRACED BY		
	L. B. Jackson	10-61	
	CHECKED BY		
	E. Harris	10-61	
	SHEET	OF	



ERECTION DIAGRAM - SPANS #17E, #18E, #19E & #20E



ERECTION DIAGRAM - SPANS #21E, #22E & #23E

All Beam Dimensions Are from C-C Piers

MICHIGAN STATE HIGHWAY DEPARTMENT

REVISIONS			
NO.	DESCRIPTION	DATE	BY

SQUAD BOSS	
DRAWN BY	L. B. Jackson 10-61
TRACED BY	L. B. Jackson 10-61
CHECKED BY	Edwards 10-61
SHEET	
OF	