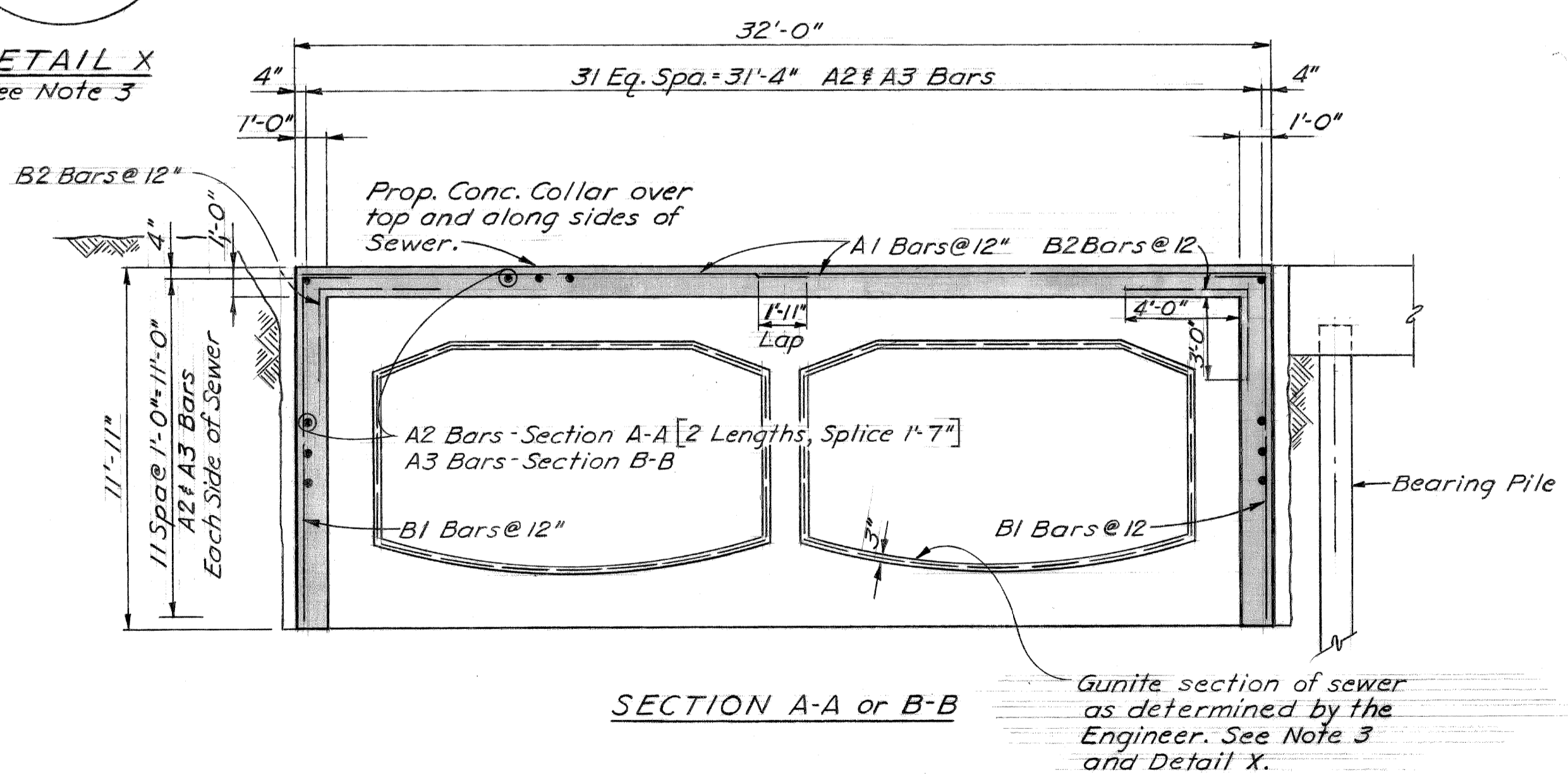


DETAIL X
See Note 3



SECTION A-A or B-B

NOTES:

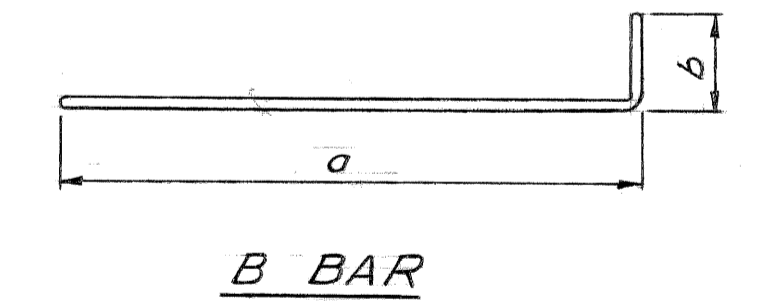
1. The work shown is for the repair of the portions of the sewer exhibiting cracks as inspected on August 5, 1966. If at the time of performing this work, there are cracks beyond the limits of cracking indicated in the above inspection, the repair work shall be extended 5' beyond these cracks as directed by the Engineer.
2. All work and materials shall be in accordance with the M.D.S.H. Standard Specifications for Road and Bridge Construction - 1965 Edition.
3. After all piles are driven, the sewer shall be dewatered and the invert examined for cracks. If, in the opinion of the Engineer, further repair is indicated, the work shall be performed as shown in Detail X.
4. The work in the vicinity of the footing shall be performed in such a manner so as not to undermine the footing.
5. The top and sides of the sewer shall be sandblasted in the areas of the collar before placing the collar.
6. The thickness of the collar immediately under the pier and/or abutment grade beam may be reduced to the thickness of the available opening but not less than 8".
7. Edge drains as shown on the Road Plans, which conflict with the location of collar, shall be revised as indicated or as directed by the Engineer.
8. All reinforcement steel shall be accurately placed and securely held in place.
9. Excavation and backfill are incidental to concrete.

QUANTITIES

Grade A6A Concrete - Substructure 183.5 Cu. Yds.

REINFORCEMENT DETAILS

Bar	a	b	Length	Size	Amf.	Weight
A1			16'-9"	#6	184	4629
A2			29'-6"	#5	108	3323
A3			34'-6"	#5	54	1943
B1	11'-6 1/2"	2'-0"	13'-6"	#5	184	2591
B2	4'-3 1/4"	3'-3 1/2"	7'-6"	#5	184	1439
Total					13925#	



B BAR

Work this sheet with plans of proposed Project I-75-(87)53, Control Section BI82/95 D.

PLANS PREPARED BY
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEERS OFFICE
BUREAU OF HIGHWAYS AND EXPRESSWAYS

APPROVED: *R. Harris*
SANITARY ENGINEER

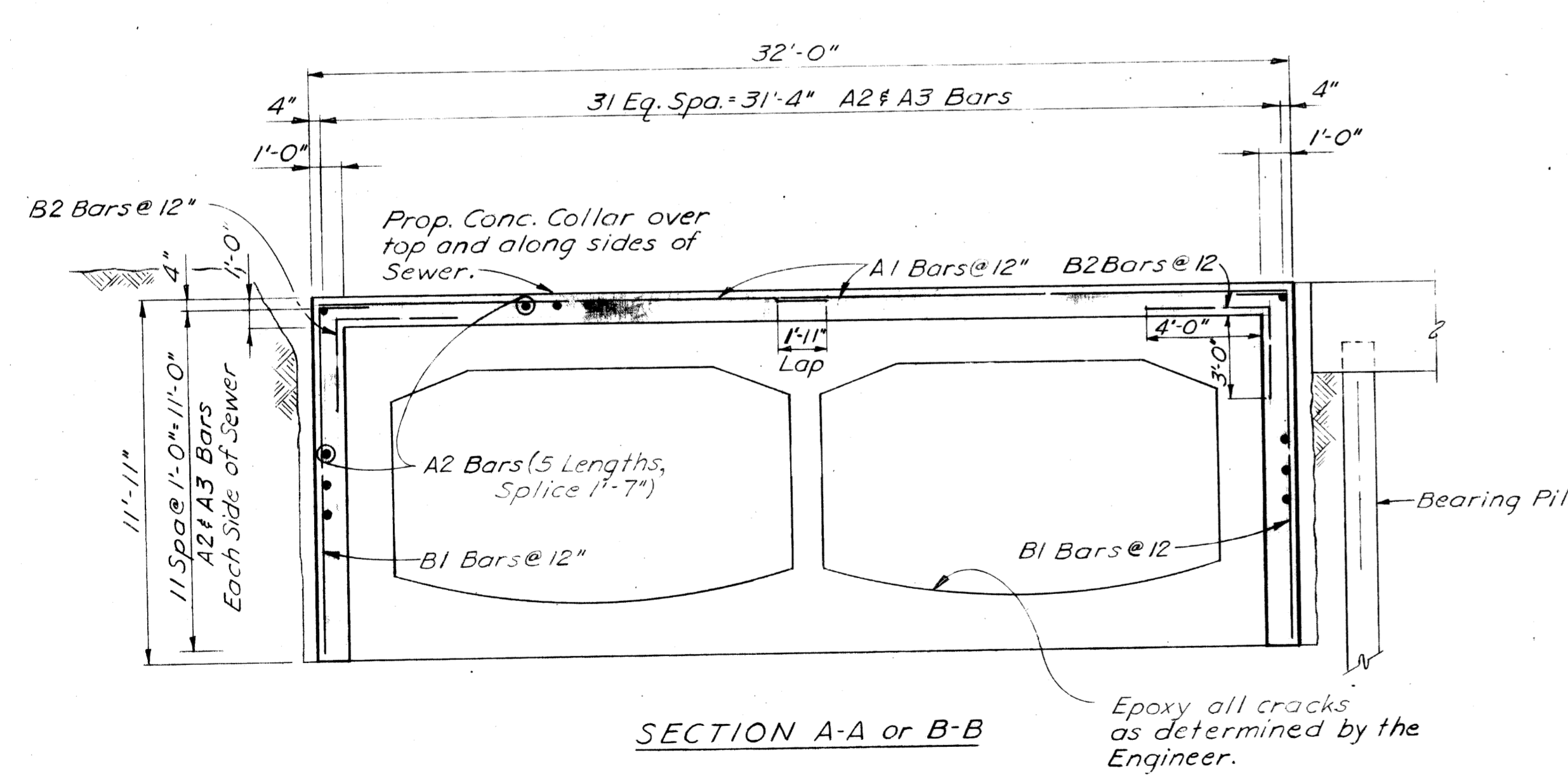
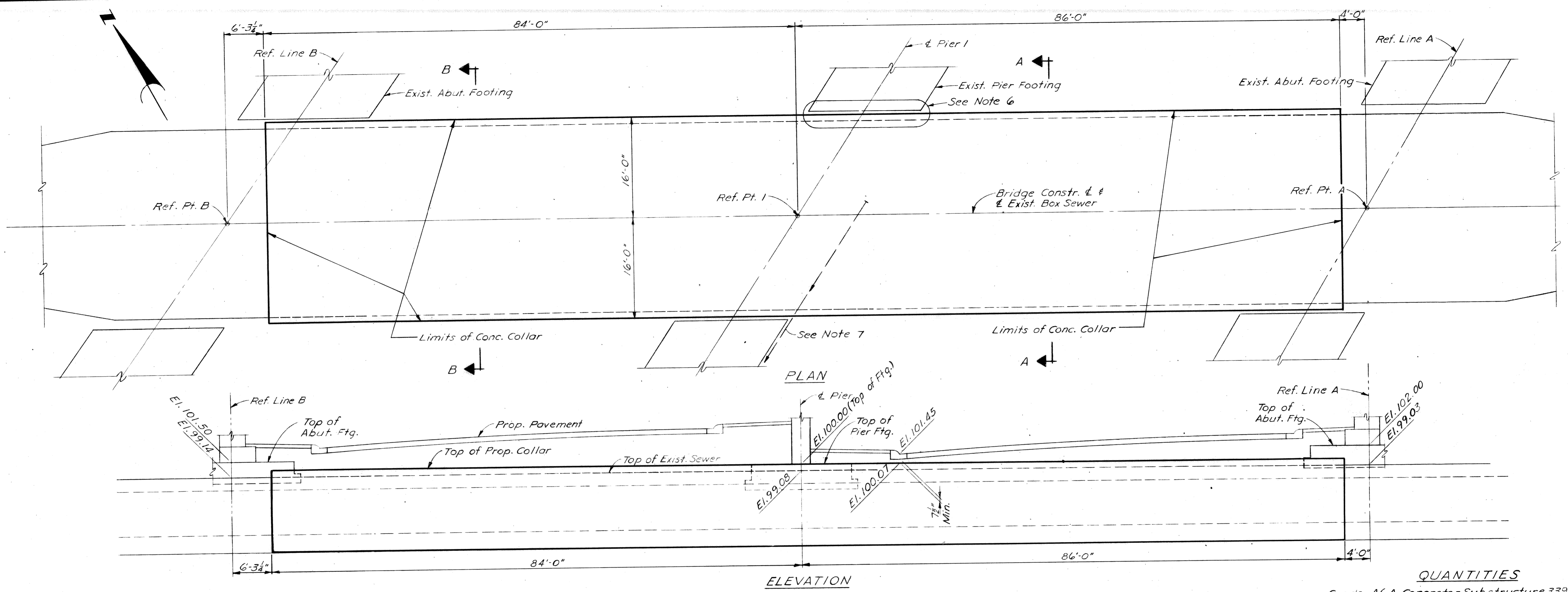
MICHIGAN DEPARTMENT OF STATE HIGHWAYS

FISHER FREEWAY I-75
SEWER ALTERATIONS AT GRAND RIVER AVE.
DOUBLE BOX SEWER REPAIR DETAILS

NO.	DESCRIPTION	DATE	BY

DESIGNED BY: *R. Harris* 10-28-66
TRACED BY: *FDW* 11-7-66
CHECKED BY: *FDW* 11-7-66
SHEET 1 OF 1

82195D CI3

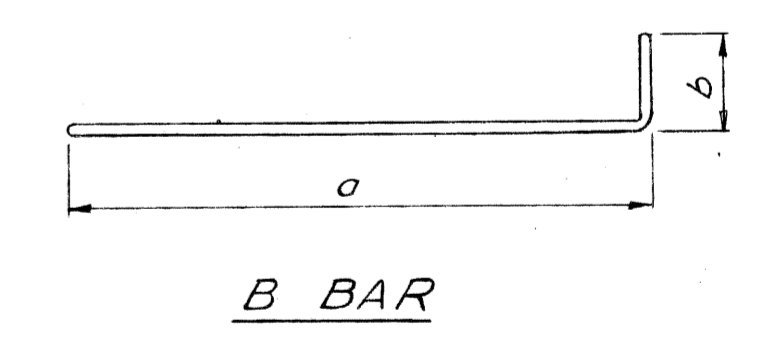


NOTES

1. The work shown is for the repair of the portions of the sewer exhibiting cracks as inspected on August 5, 1966, and on Dec. 17, 1966.
2. All work and materials shall be in accordance with the M.D.S.H. Standard Specifications for Road and Bridge Construction - 1965 Edition.
3. All cracks on the inside surface of the sewer shall be sealed with epoxy as directed by the Engineer.
4. The work in the vicinity of the footing shall be performed in such a manner so as not to undermine the footing.
5. The top and sides of the sewer shall be sand blasted in the areas of the collar before placing the collar.
6. The thickness of the collar immediately under the pier and/or abutment grade beam may be reduced to the thickness of the available opening but not less than 8".
7. Edge drains as shown on the Road Plans, which conflict with the location of collar, shall be revised as indicated or as directed by the Engineer.
8. All reinforcement steel shall be accurately placed and securely held in place.
9. Excavation and backfill are incidental to concrete.

QUANTITIES
Grade A6A Concrete - Substructure 339.0 Cu. Yds.

REINFORCEMENT DETAILS						
Bar	a	b	Length	Size	Amf.	Weight
A1			16'-9"	#6	340	8554
A2			35'-3"	#5	270	9927
B1	11'-6 1/2"	2'-0"	13'-6"	#5	340	4787
B2	4'-3 1/4"	3'-3 1/4"	7'-6"	#5	340	2660
					Total	25,928*



Work this sheet with plans of proposed Project I-75-(B7)53, Control Section B182195 D.

PLANS PREPARED BY
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
SANITARY ENGINEER

MICHIGAN DEPARTMENT OF STATE HIGHWAYS

**FISHER FREEWAY I-75
SEWER ALTERATIONS AT GRAND RIVER AVE.
DOUBLE BOX SEWER REPAIR DETAILS**

REVISIONS			
NO.	DESCRIPTION	DATE	BY

82195D CI3