

Table of Contents

Page

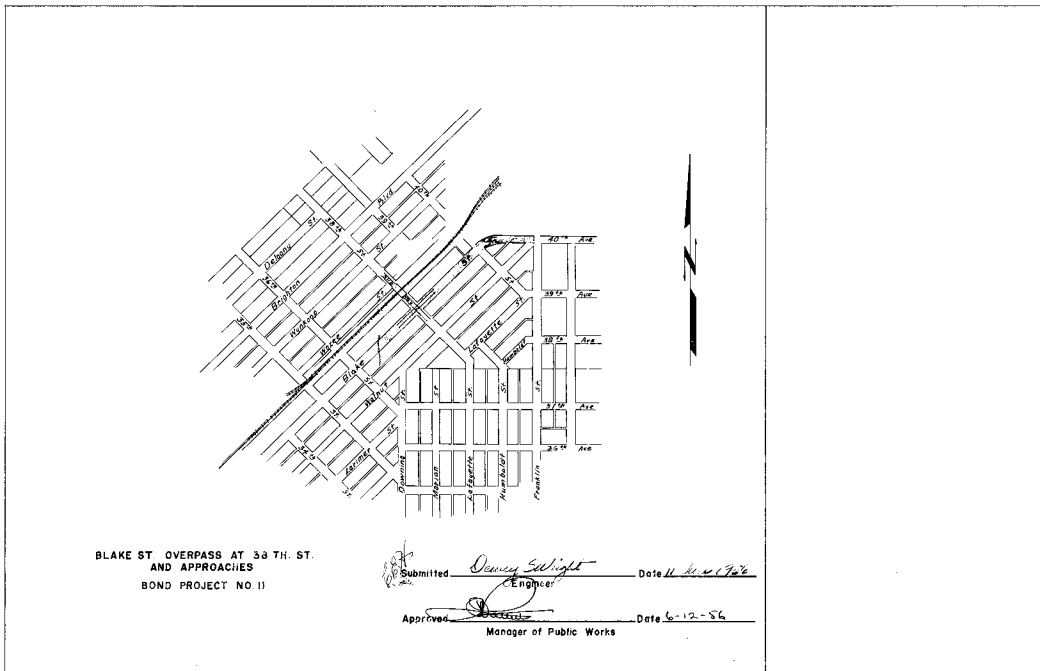
Title Sheet	2
Plan and Profile	3
Access Roadway Plan and Details	4
General Plan and Abutment	5
Steel Details	6
Deck and Approach Slab	7
Retaining Walls	8

CITY AND COUNTY OF DENVER
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING SECTION

BLAKE ST. OVERPASS AT 38 TH. ST.
 AND APPROACHES

BOND PROJECT NO. 11

INDEX OF SHEETS		
Sheet No.	Description	Dwg. No.
1	Title Sheet	134-204 134-10
2	Plan & Profile	"
3	Access Roadway, Plan & Details	"
4	General Plan & Abutment	"
5	Steel Details	"
6	Deck & Approach Slab	"
7	Retaining Walls	"
	Standard Bridge Railing, Curb, & Drainage Details	134-20-A
	Standard Details for Street Paving	104-1C
	Standard Details for Barricades	104-1E
	Inlets with Openings in 4" Sloping Curb, 6" & 9" Vertical Curb	104-1G
	Trenching & Bedding Standard Details	104-1H
	Standard Sidewalk and Driveway Details in Commercial Areas	104-1V



Designed By H. Mebeers Date 6/13/56
 Structural Design Engineer

BLAKE ST. OVERPASS AT 38 TH. ST.
 AND APPROACHES
 BOND PROJECT NO. 11

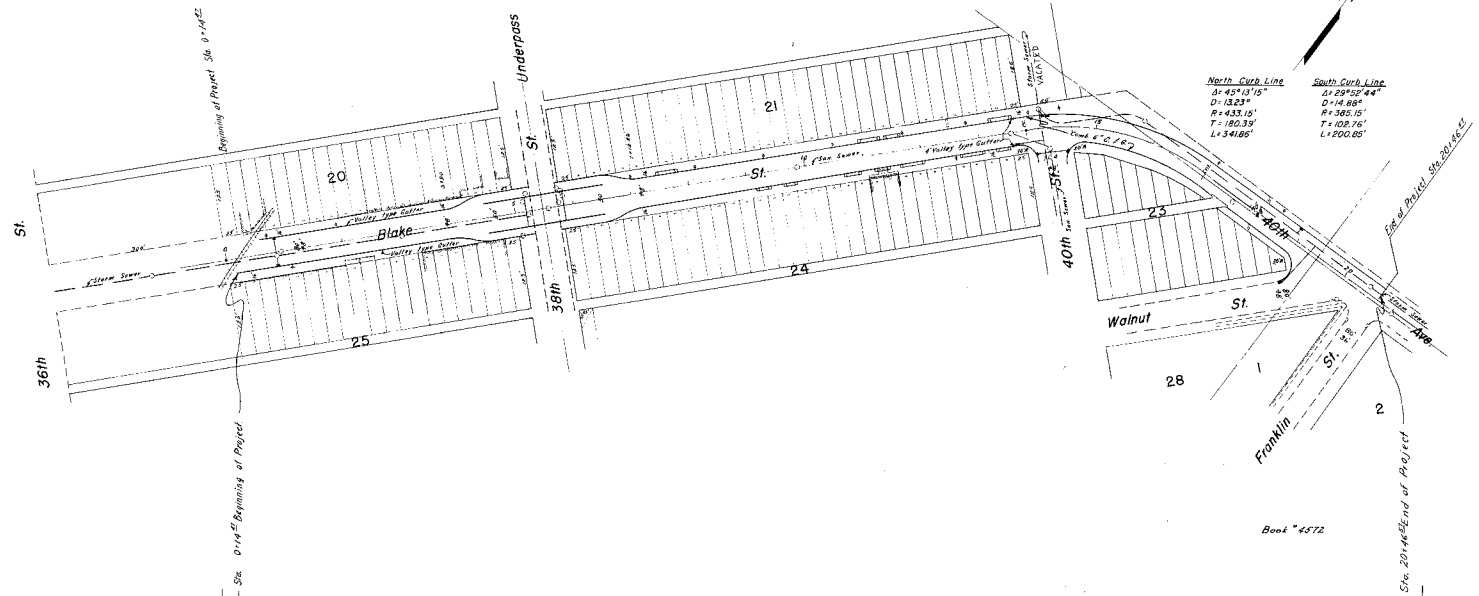
Submitted Dennis Schlicht Date 11/21/56
 Engineer
 Approved Dennis Schlicht Date 6-12-56
 Manager of Public Works

Recommended John Marshall Date 6-13-56
 Design Engineer
 Recommended C. E. Johnson Date 6-13-56
 Deputy City Engineer
 Approved Dennis Schlicht Date 6-13-56
 City Engineer
 As Constructed _____ Date _____
 Engineer

D:\WORK\706\081856001

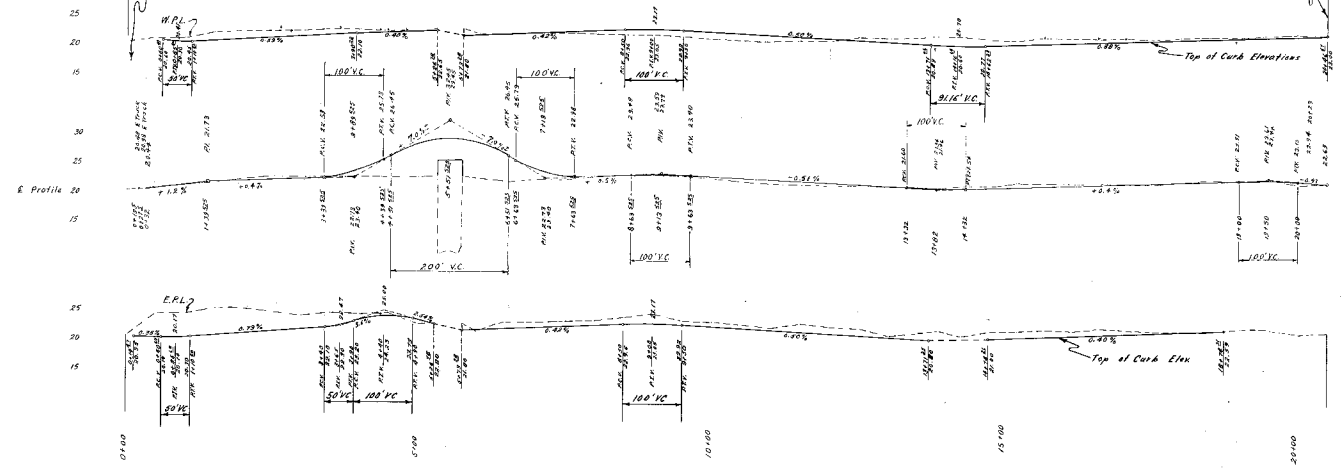
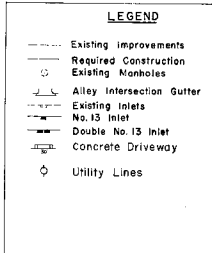
Sta. 3+90 to Sta. 7+12.22
Rec'd - Widened pavement and retaining walls as per Sheet No. J.

Sta. 5+08.78 to Sta. 5+95.44
Rec'd - Bridge and approach slabs as per Sheets No. L to Z, inclusive



North Curve Line
Δ: 42°13'15"
D: 1323'
P: 433.16'
T: 100.35'
L: 341.86'

South Curve Line
Δ: 29°52'44"
D: 14.86'
P: 363.15'
T: 100.76'
L: 200.65'



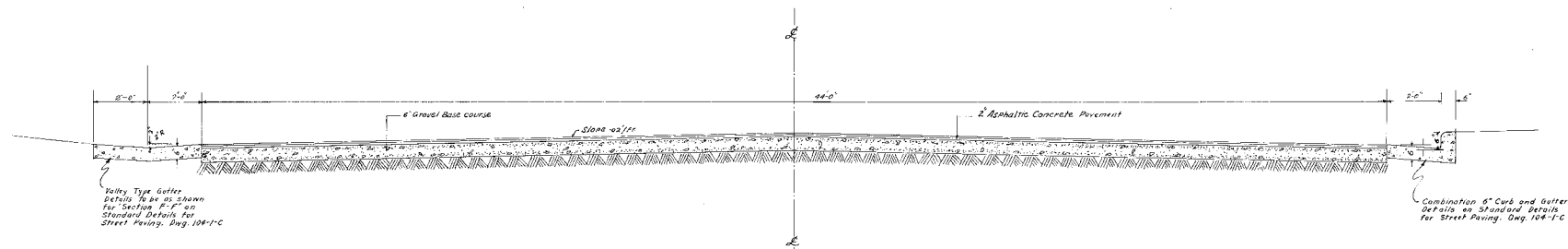
Field Book # 3136 Block Book # 4572
CITY AND COUNTY OF DENVER
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SECTION

BOND PROJECT No 11
Blake Street Overpass at 38th Street and Approaches

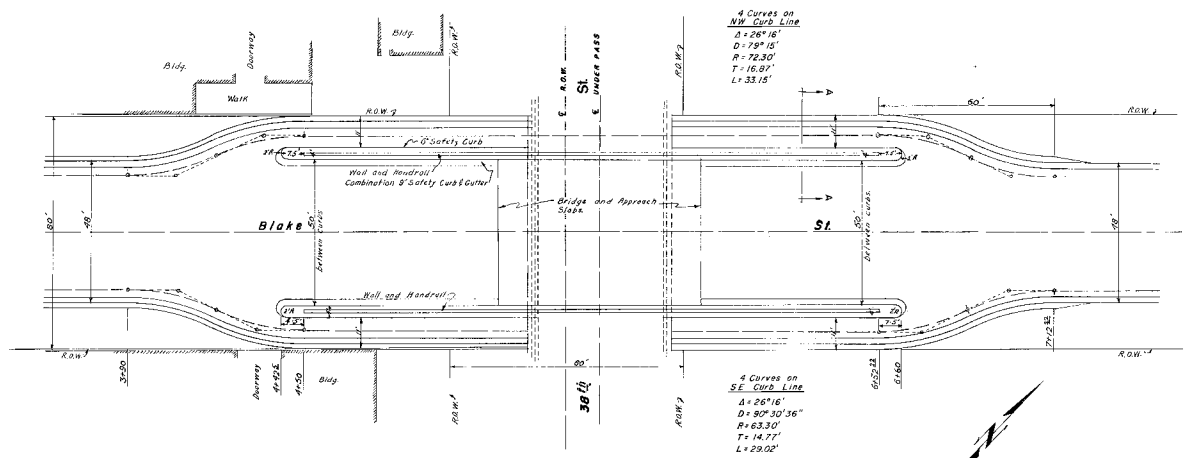
AS CONSTRUCTED

THIS PLAN AND SPECIFICATIONS SHALL BE CONSIDERED AS THE BASIS FOR THE CONTRACTOR'S OBLIGATION TO CONSTRUCT THE PROJECT AS SHOWN AND SPECIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

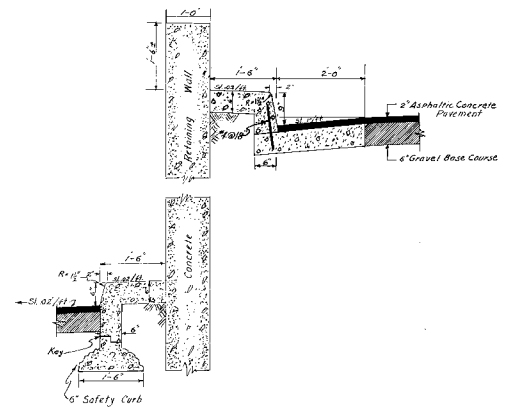
REVISED	DATE	BY	REASON
0-12-56			



TYPICAL ROADWAY SECTION
Scale 1" = 2' Ft.



ACCESS ROADWAY PLAN
OVERPASS AT 38th AND BLAKE ST.
Scale 1" = 20'



SECTION A-A
CURB and GUTTER DETAILS at BRIDGE APPROACHES
See Sheet 7 of Plans for Retaining Wall Details.
Scale 3/4" = 1' Ft.

AS CONSTRUCTED

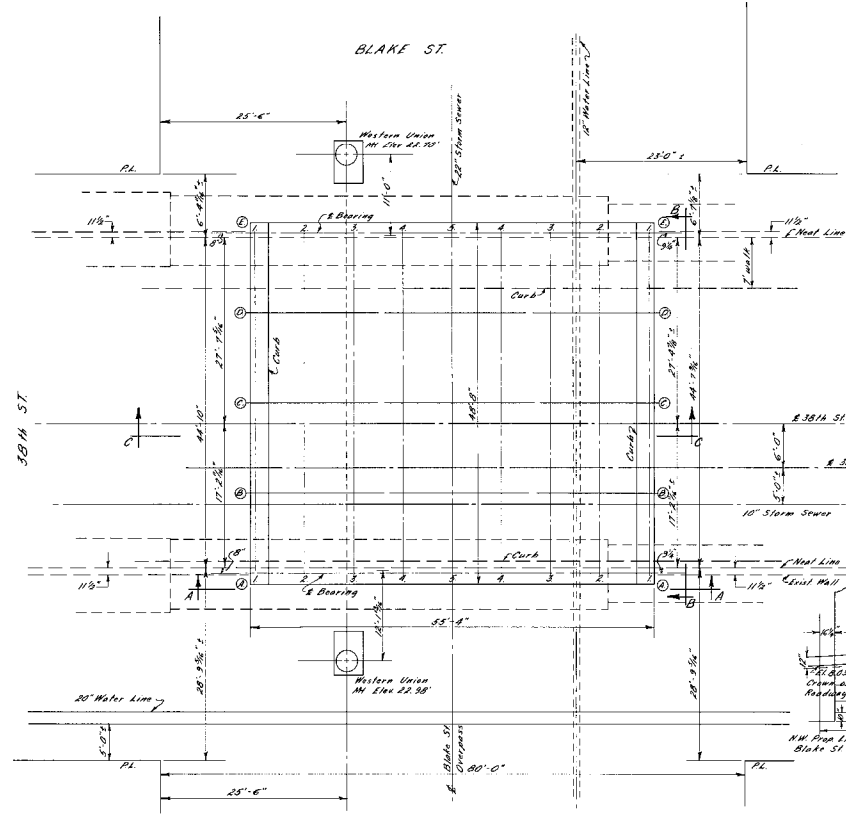
Field Book # 3136 Block Book # 4372

CITY AND COUNTY OF DENVER
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SECTION

BOND PROJECT No. II
ACCESS ROADWAY PLAN & DETAILS
SI 3+90 to 7+12-22

DATE	BY	CHKD	APP'D	REVISED
2-12-56	AS DRAWN			

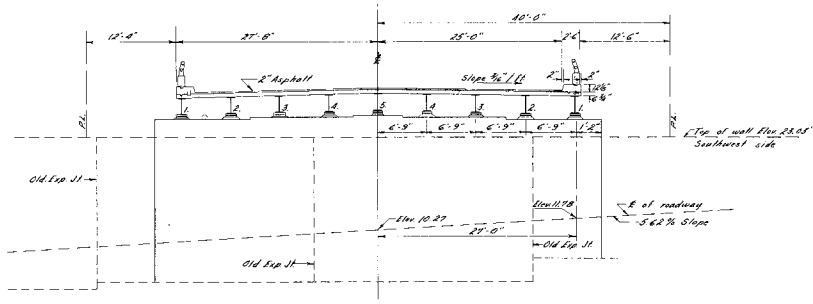
154-10
156-204



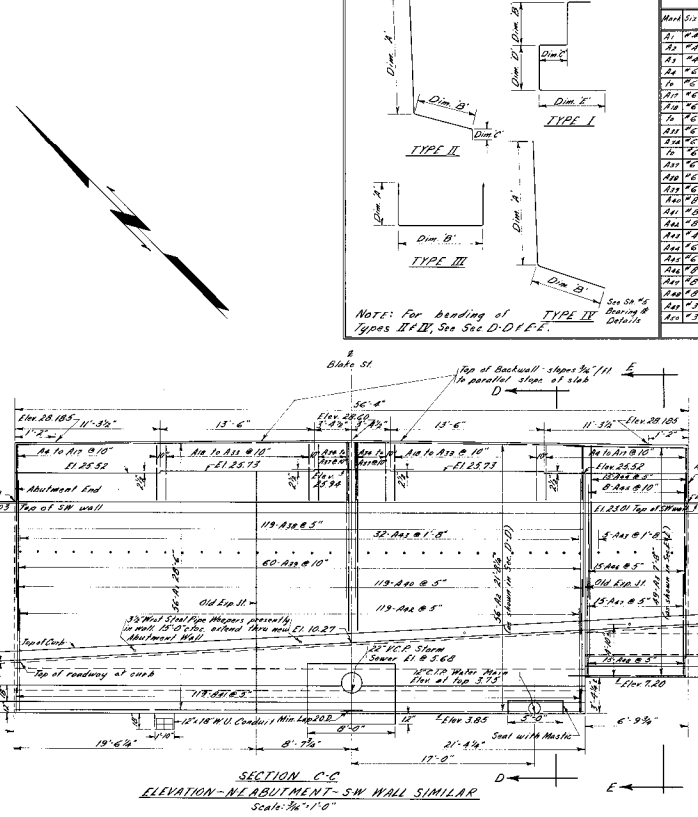
LOCATION PLAN

SLAB ELEVATIONS					
A	B	C	D	E	
1	20.00	20.00	20.00	20.00	20.00
2	20.00	20.00	20.00	20.00	20.00
3	20.00	20.00	20.00	20.00	20.00
4	20.00	20.00	20.00	20.00	20.00
5	20.00	20.00	20.00	20.00	20.00

BEARING PLATE ELEVATIONS					
1	2	3	4	5	
25.05	25.95	26.06	26.16	26.27	

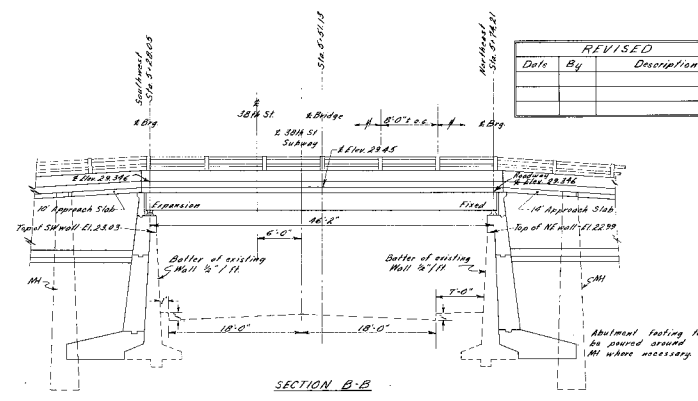


SECTION A-A



SECTION C-C
ELEVATION - ABUTMENT - SW WALL SIMILAR
Scale: 3/4" = 1'-0"

Note: Cut reinforcing bars where necessary to place pipes in well.

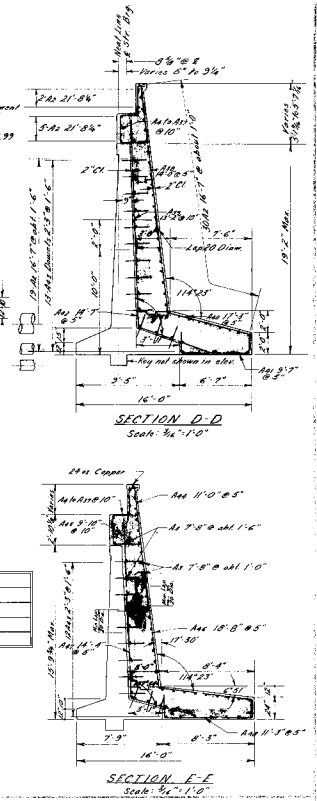


SECTION B-B

AS CONSTRUCTED

REINFORCING STEEL SCHEDULE											
For Two Abutments											
Max Size	No	Length	Total Length	Total Weight	Type	Dim A	Dim B	Dim C	Dim D	Dim E	
#1	12	28'-6"	343.2	6668	#1						
#2	78	11'-2"	863.4	17268	#2						
#3	12	7'-6"	91.2	1824	#3						
#4	6	3'-3"	20.0	400	#4						
#5	6	3'-3"	20.0	400	#5						
#6	6	3'-3"	20.0	400	#6						
#7	6	3'-3"	20.0	400	#7						
#8	6	3'-3"	20.0	400	#8						
#9	6	3'-3"	20.0	400	#9						
#10	6	3'-3"	20.0	400	#10						
#11	6	3'-3"	20.0	400	#11						
#12	6	3'-3"	20.0	400	#12						
#13	6	3'-3"	20.0	400	#13						
#14	6	3'-3"	20.0	400	#14						
#15	6	3'-3"	20.0	400	#15						
#16	6	3'-3"	20.0	400	#16						
#17	6	3'-3"	20.0	400	#17						
#18	6	3'-3"	20.0	400	#18						
#19	6	3'-3"	20.0	400	#19						
#20	6	3'-3"	20.0	400	#20						
#21	6	3'-3"	20.0	400	#21						
#22	6	3'-3"	20.0	400	#22						
#23	6	3'-3"	20.0	400	#23						
#24	6	3'-3"	20.0	400	#24						
#25	6	3'-3"	20.0	400	#25						
#26	6	3'-3"	20.0	400	#26						
#27	6	3'-3"	20.0	400	#27						
#28	6	3'-3"	20.0	400	#28						
#29	6	3'-3"	20.0	400	#29						
#30	6	3'-3"	20.0	400	#30						
#31	6	3'-3"	20.0	400	#31						
#32	6	3'-3"	20.0	400	#32						
#33	6	3'-3"	20.0	400	#33						
#34	6	3'-3"	20.0	400	#34						
#35	6	3'-3"	20.0	400	#35						
#36	6	3'-3"	20.0	400	#36						
#37	6	3'-3"	20.0	400	#37						
#38	6	3'-3"	20.0	400	#38						
#39	6	3'-3"	20.0	400	#39						
#40	6	3'-3"	20.0	400	#40						
#41	6	3'-3"	20.0	400	#41						
#42	6	3'-3"	20.0	400	#42						
#43	6	3'-3"	20.0	400	#43						
#44	6	3'-3"	20.0	400	#44						
#45	6	3'-3"	20.0	400	#45						
#46	6	3'-3"	20.0	400	#46						
#47	6	3'-3"	20.0	400	#47						
#48	6	3'-3"	20.0	400	#48						
#49	6	3'-3"	20.0	400	#49						
#50	6	3'-3"	20.0	400	#50						
#51	6	3'-3"	20.0	400	#51						
#52	6	3'-3"	20.0	400	#52						
#53	6	3'-3"	20.0	400	#53						
#54	6	3'-3"	20.0	400	#54						
#55	6	3'-3"	20.0	400	#55						
#56	6	3'-3"	20.0	400	#56						
#57	6	3'-3"	20.0	400	#57						
#58	6	3'-3"	20.0	400	#58						
#59	6	3'-3"	20.0	400	#59						
#60	6	3'-3"	20.0	400	#60						
#61	6	3'-3"	20.0	400	#61						
#62	6	3'-3"	20.0	400	#62						
#63	6	3'-3"	20.0	400	#63						
#64	6	3'-3"	20.0	400	#64						
#65	6	3'-3"	20.0	400	#65						
#66	6	3'-3"	20.0	400	#66						
#67	6	3'-3"	20.0	400	#67						
#68	6	3'-3"	20.0	400	#68						
#69	6	3'-3"	20.0	400	#69						
#70	6	3'-3"	20.0	400	#70						
#71	6	3'-3"	20.0	400	#71						
#72	6	3'-3"	20.0	400	#72						
#73	6	3'-3"	20.0	400	#73						
#74	6	3'-3"	20.0	400	#74						
#75	6	3'-3"	20.0	400	#75						
#76	6	3'-3"	20.0	400	#76						
#77	6	3'-3"	20.0	400	#77						
#78	6	3'-3"	20.0	400	#78						
#79	6	3'-3"	20.0	400	#79						
#80	6	3'-3"	20.0	400	#80						
#81	6	3'-3"	20.0	400	#81						
#82	6	3'-3"	20.0	400	#82						
#83	6	3'-3"	20.0	400	#83						
#84	6	3'-3"	20.0	400	#84						
#85	6	3'-3"	20.0	400	#85						
#86	6	3'-3"	20.0	400	#86						
#87	6	3'-3"	20.0	400	#87						
#88	6	3'-3"	20.0	400	#88						
#89	6	3'-3"	20.0	400	#89						
#90	6	3'-3"	20.0	400	#90						
#91	6	3'-3"	20.0	400	#91						
#92	6	3'-3"	20.0	400	#92						
#93	6	3'-3"	20.0	400	#93						
#94	6	3'-3"	20.0	400	#94						
#95	6	3'-3"	20.0	400	#95						
#96	6	3'-3"	20.0	400	#96						
#97	6	3'-3"	20.0	400	#97						
#98	6	3'-3"	20.0	400	#98						
#99	6	3'-3"	20.0	400	#99						
#100	6	3'-3"	20.0	400	#100						
Total			15751	10k							

NOTE: For bending of TYPE IV Details See 38th St. Boring Details

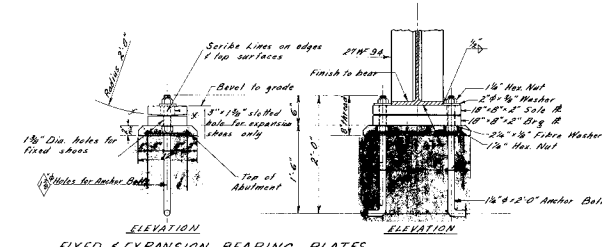
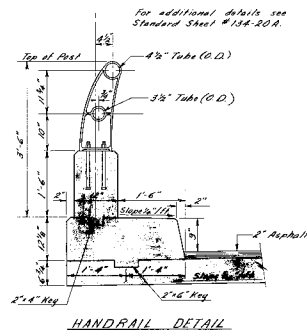
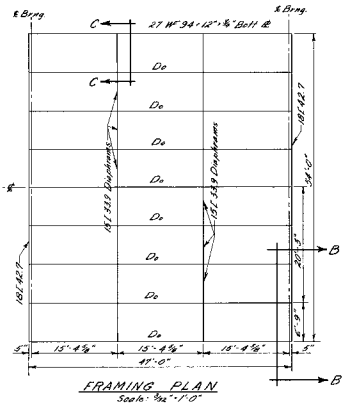


SECTION D-D
Scale: 3/4" = 1'-0"

SECTION E-E
Scale: 3/4" = 1'-0"

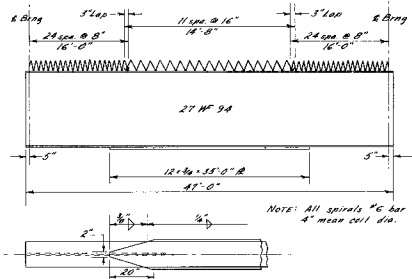
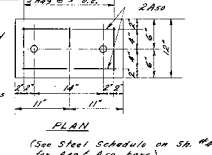
CITY AND COUNTY OF DENVER
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SECTION
BOND PROJECT No. 11
BLAKE ST OVERPASS AT 38TH ST.
GENERAL PLAN & ABUTMENT

DATE: May 31, 1936
DRAWN BY: [Signature]
CHECKED BY: [Signature]
SCALE: AS NOTED

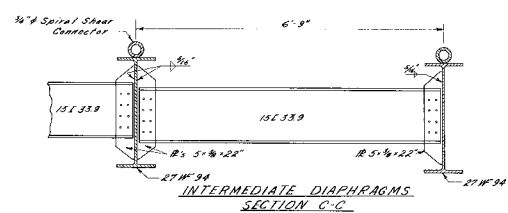
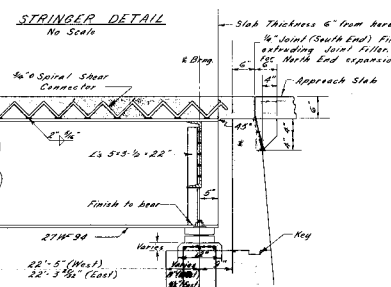


FIXED EXPANSION BEARING PLATES
Scale: 1"=1'-0"

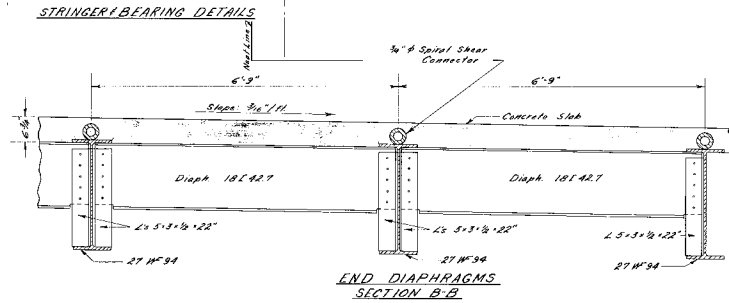
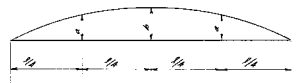
NOTE: Each anchor bolt is provided with sufficient threads and an extra nut for adjusting the bearing plates to exact elevation. A fiber washer is provided to compress under load thus relieving bearing on the anchor bolt. After adjustment for elevation, the plates can be moved laterally to correct for e. spacing, and the scribe lines can be aligned with a wire or thin line. After adjustment, all plates shall be secured by tightening upper nuts. Concrete pads shall be poured as shown on the drawings. The space around the anchor bolts shall be filled with molten ductile metal or zinc after the setting of the masonry plates has been checked. At sliding bearings, where the sole plates engage the anchor bolts, the holes in the bearing plates must be filled before the girders are set in place.



NOTE: Zinc Chromate Shop Coat (Aluminum Paint Field Coat) shall be applied. No paint shall be applied to any Structural Steel in contact with Concrete.
Use 3/8" Rivets throughout.



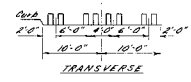
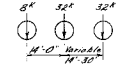
Di. Det.	a	b
1	0.47"	0.66"
2	1.40"	1.80"
3	1.87"	2.46"



GENERAL NOTES

All work shall be done in accordance with Specifications of the City Engineer, City & County of Denver, and all applicable addenda thereto.

LOADING Dead Load - Actual Computed Weight of Structure plus 25 lbs. per sq. ft. Additional Asphalt Wearing Surface.
Live Load: 120-516-84 Loading



LONGITUDINAL

TRANSVERSE

Impact: 1-75%
Wind: 20 m.p.h. on 1/2 times the area of structure with a minimum of 200 p.s.f. @ 200 ft. on buildings.
Normal Temperature Assumed at 68°F
Temperature Rise 55°F
Temperature Fall 45°F

DESIGN STRESSES - According to "Standard Specifications for Highway Bridges," by the American Association of State Highway Officials, 1953
Concrete is 3000 psi (3000 psi Ull Comp Strength)
Reinforcing is 20,000 psi #10
Structural is 18,000 psi

SUMMARY OF QUANTITIES (For Bridge Only)		
ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY
6	Structure Elevation	630 Cu Yds.
12a	Slabs "X" Concrete	373 Cu Yds.
12b	Reinforcing Steel	63,500 Lbs.
12c	Shear Connector Steel	1,100 Lbs.
13	Structural Steel	63,200 Lbs.
15a	Removing Underpass Handrail	114 Lin. Ft.
15b	Aluminum Handrail	98 Lin. Ft.
REVISED		
Date	By	Description
7-23-56	G.B.	Rev. Order of Spiral Connector Lengths

CITY AND COUNTY OF DENVER
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SECTION
BOND PROJECT No. 11
BLAKE ST OVERTAKE AT 3814 ST.
STEEL DETAIL

DATE	BY	DESCRIPTION
5-31-56	J.P. Miller	1"=1'-0"
		1"=1'-0"

