

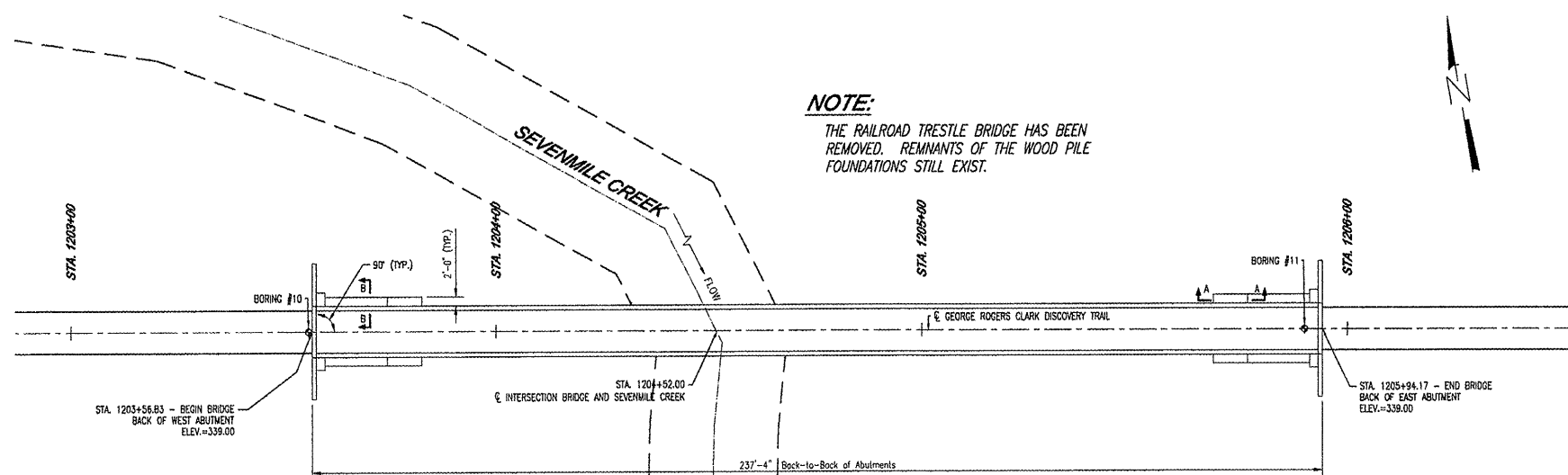
**BENCH MARK**

1/2" DIA. X 24" REBAR, WITH PLASTIC SURVEY CAP MARKED "CITY OF METROPOLIS." C.P. (3-7) #55, ELEV. = 339.68, LOCATED ON CENTERLINE OF RAILROAD BED AT STATION 1205+87.88.

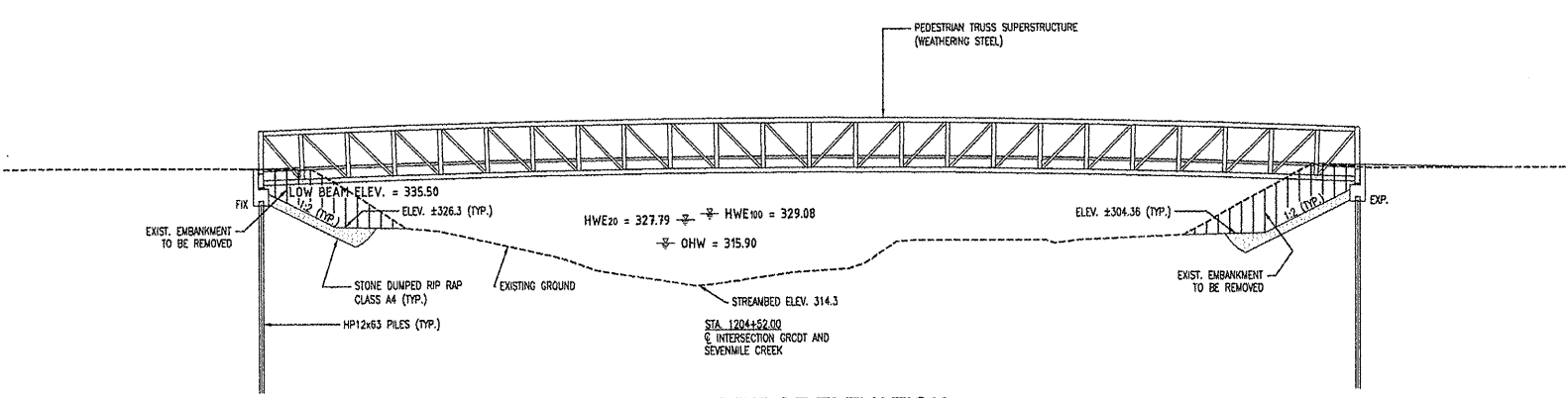
**NOTE:**

THE PUBLISHED 100yr FLOOD ELEVATION FOR THE OHIO RIVER IS 338.0 THEREFORE, BACKWATER FROM THE OHIO RIVER CAN ENCROACH ON THE BRIDGE SUPERSTRUCTURE.

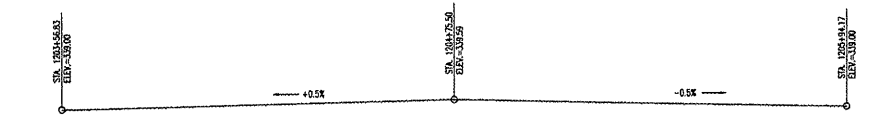
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
GRCDT	09-00038-00-BT	MASSAC	55	39
General Plan and Elevation				
FEDERAL PROJECT NO. ARA-5045(009)			CONTRACT NO. 99417	



**BRIDGE PLAN**  
SCALE: 1" = 20'



**BRIDGE ELEVATION**  
SCALE: 1" = 20' (HORIZONTAL AND VERTICAL)  
OHW = ORDINARY HIGH WATER



**PROFILE GRADE**  
(Along & Bike Path)

**HIGHWAY CLASSIFICATION**

CLASS: BIKE PATH  
A.D.T.: N/A  
D.H.V.: N/A  
DESIGN SPEED: 20 MPH  
POSTED SPEED: N/A

**DESIGN STRESSES**

FIELD UNITS  
f'c = 3,500 psi  
fy = 60,000 psi (reinforcement)  
fy = 50,000 psi (M270 GRADE 50W)  
fy = 36,000 psi (A36)

**DESIGN SPECIFICATIONS**

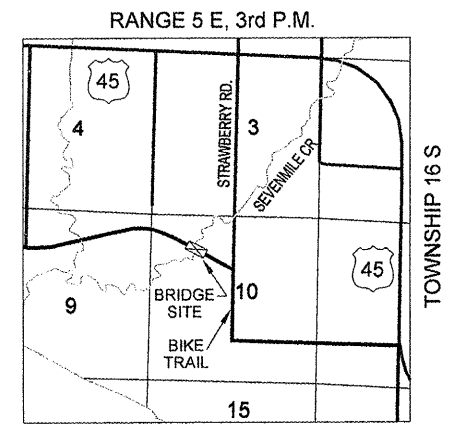
2002 AASHTO STANDARD SPECIFICATIONS  
1997 AASHTO GUIDE SPECIFICATIONS FOR DESIGN  
F PEDESTRIAN BRIDGES

**SEISMIC DATA**

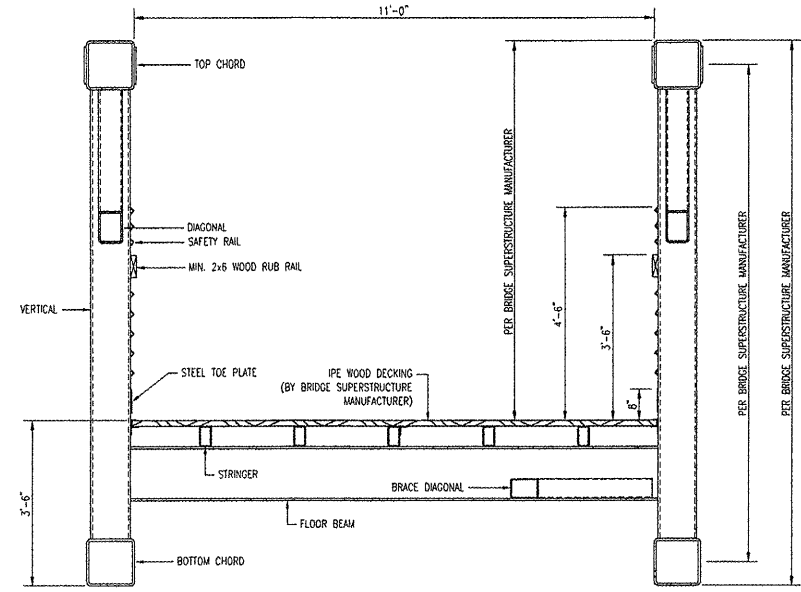
SEISMIC PERFORMANCE CATEGORY (SPC) = B  
BEDROCK ACCELERATION COEFFICIENT (A) = 0.15g  
SITE COEFFICIENT = 1.2

**LOADING H-10**

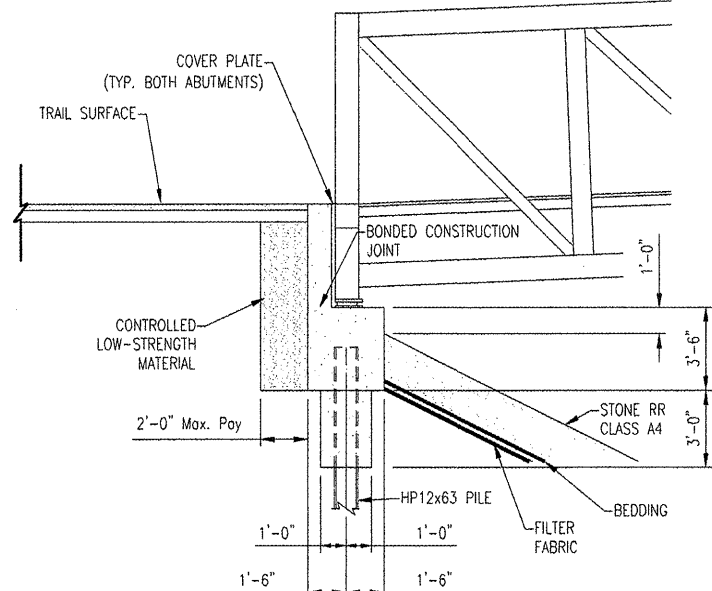
85 PSF MIN. LIVE LOAD



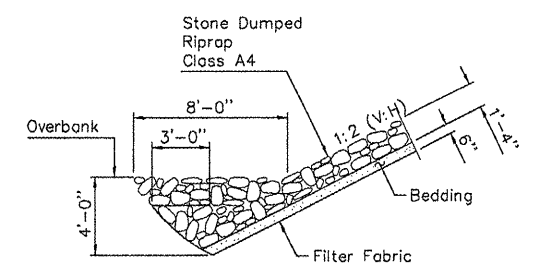
**LOCATION SKETCH**



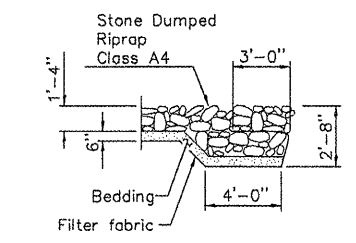
**CROSS SECTION**



**SECTION THRU ABUTMENT**



**SECTION A-A**



**SECTION B-B**

**WATERWAY INFORMATION**

DRAINAGE AREA = 14.635 SQ. MI.

FLOOD	FREQ. (YR.)	Q (C.F.S.)	OPENING (SQ. FT.)		NATURAL H.W.E.		HEAD (FT.)		HEADWATER ELEV.	
			EXIST.	PROP.	EXIST.	PROP.	EXIST.	PROP.		
DESIGN	20	4,073	N/A	1,322	327.76	0	0.03	327.76	327.79	
CHECK	50	5,160	N/A	1,495	328.58	0	0.05	328.58	328.63	
BASE	100	5,910	N/A	1,588	328.99	0	0.09	328.99	329.08	

100 YEAR VELOCITY THROUGH PROP. BRIDGE = 3.62 fps



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**GEORGE ROGERS CLARK DISCOVERY TRAIL**  
**OVER SEVENMILE CREEK**  
SECTION 09-00038-00-BT  
MASSAC COUNTY  
STATION 1204+52.00  
STRUCTURE NUMBER 064-9919

SEVEN STRUCTURAL ENGINEERS  
Brian C. Giltner  
065-008280  
November 30, 2010  
Date of Issue