Benchmarks: 1.) "□" on top of East conc. railing of bridge on University Street between Virginia Avenue & Apple Street. Elevation = 765.01
2.) Top of fire hydrant NW corner of Virginia Ave. and University Street. Elevation = 762.81
3.) Top of fire hydrant SW corner of Virginia Avenue and Main Street. Elevation = 763.64

Existing Structure:
Consists of a single-span bridge with concrete slab and concrete thru girders. The structure has a bituminous overlay on reinforced concrete closed abutments supported by concrete footings. The structure is skewed 45 degrees right forward and is approximately 28'-0" out to out deck and 45'-0" back to back abutments. There is a separate pedestrian concrete bridge approximately 40'-0" long which shall also be removed as part of Removal of Existing Structures. No salvage for either structure.

DESIGN SPECIFICATIONS

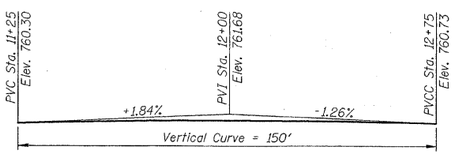
AASHTO 2002

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

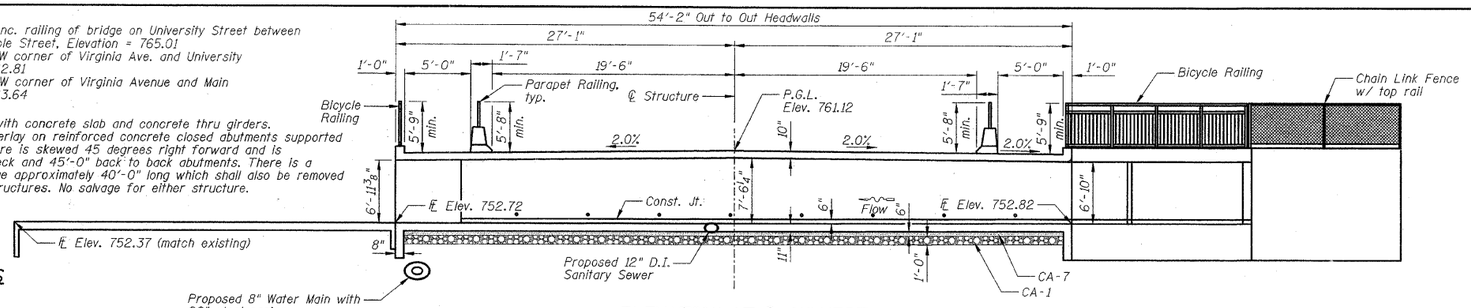
DESIGN STRESSES

CAST IN PLACE CONCRETE (FIELD UNITS)
f'c = 4,000 psi @ 14 days
fy = 60,000 psi (Reinforcement)



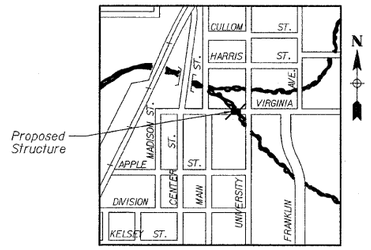
PROFILE GRADE

Virginia Avenue (℄ Roadway)



ELEVATION AT ℄ CULVERT

Note: Horizontal dimensions are at right angles to the roadway.



LOCATION MAP

VIRGINIA AVENUE OVER
SUGAR CREEK
BUILT 20__ BY
TOWN OF NORMAL
SECTION 04-00226-00-BR
LOADING HS20
STR. NO. 057-7834

NAME PLATE DETAIL

See Standard 515001

INDEX TO SHEETS

WATERWAY INFORMATION

Drainage Area (Sq. Mi.) = 10.0 — Low Grade Elev. = 759.47 @ Sta. 10+34.64

Flood	Freq. Year	Q C.F.S.	Opening (Sq. Ft.) Exist.	Opening (Sq. Ft.) Prop.	Nat. H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	30	1700	168	249	761.77	0.01*	0.0*	761.78*	761.77*
Base	100	2360	168	249	762.57	0.01*	0.0*	762.58*	762.57*
Max. Freq. Overtopping									

* Includes flow over road

I certify that to the best of my knowledge, information and belief, this box culvert design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current 'AASHTO Standard Specifications for Highway Bridges'.

MARK S. WYLIE 081-005002 LICENSED STRUCTURAL ENGINEER OF BLOOMINGTON ILLINOIS

Mark S Wylie Date 7/22/09
MARK S. WYLIE
ILLINOIS STRUCTURAL ENGINEER
NO. 081-005002
Exp. Date 11/30/10

DESIGNED	SDH	REVISED	-
DRAWN	JWK	REVISED	-
CHECKED	MSW	REVISED	-
DATE	07/22/2009	REVISED	-

TOWN OF NORMAL

GENERAL PLAN AND ELEVATION

SCALE: | SHEET NO. C1 OF 23 SHEETS | STA. | TO STA.

VIRGINIA AVENUE OVER SUGAR CREEK
SECTION 04-00226-00-BR
MCLEAN COUNTY

F.A.U.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6366	04-00226-00-BR	MCLEAN	52	22
	S.N. 057-7834	CONTRACT NO. 91416		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FARNSWORTH GROUP, INC.
CONSULTING ENGINEERS - 2709 MCGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX

24-6082