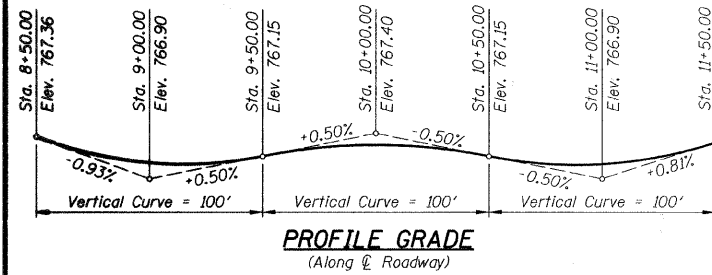
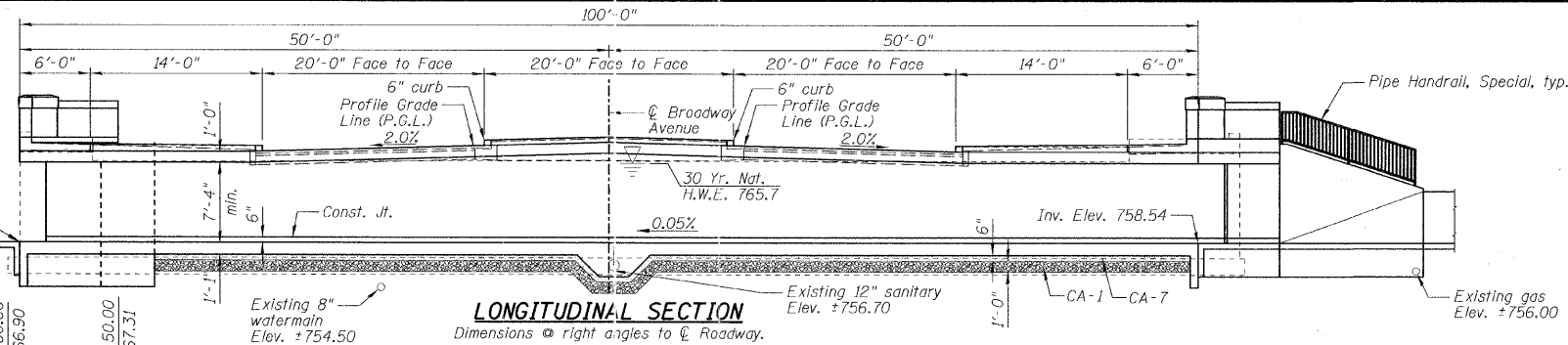


- Benchmarks:**
- 1.) Top of fire hydrant North corner of Archie Ave., West side of Broadway Ave., Elevation = 779.29.
 - 2.) Top of fire hydrant West side of Broadway Ave. ±100' South of Bridge in front of house #903, Elevation = 770.29.
 - 3.) Top of fire hydrant North corner of Broadway Terrace, West side of Broadway Ave., Elevation = 774.52.

Existing Structure: The existing structure is a 27'-0" single span structure with closed abutments supported by concrete footings.

No Salvage.



DESIGN SPECIFICATIONS

AASHTO 2002

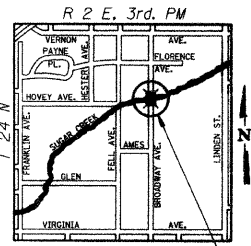
DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi (Cast-In-Place Concrete)
 $f_y = 60,000$ psi (Reinforcement)

LOADING HS20-44

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



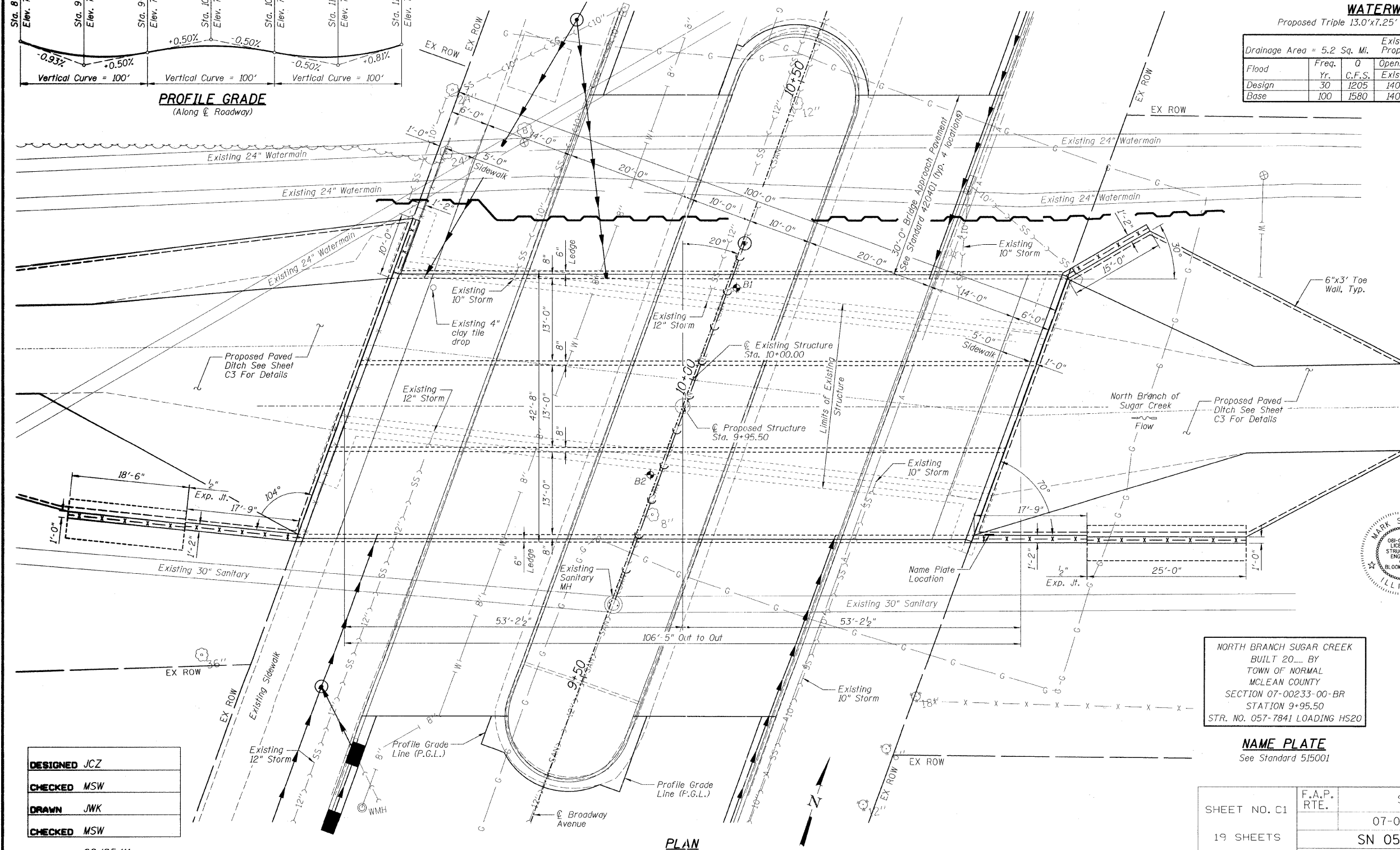
WATERWAY INFORMATION

Proposed Triple 13.0'x7.25' Box Culvert with 20° Skew Right Foward

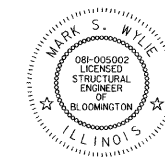
Drainage Area = 5.2 Sq. Mi.		Existing Low Grade Elev. 766.90 @ Sta. 9+30.00		Proposed Low Grade Elev. 766.90 @ Sta. 9+30.00	
Flood Yr.	Q	Opening Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.
Design	30	1205	140	283	765.7
Base	100	1580	140	283	766.8
				3.5	1.5
				770.3	768.3

INDEX TO SHEETS

SHEET NO.	TITLE
C1	GENERAL PLAN AND ELEVATION
C2	BILL OF MATERIAL, GENERAL NOTES AND CULVERT DETAILS
C3	PAVED DITCH PLAN
C4	TEMPORARY SHEET PILING DETAIL
C5	TOP OF APPROACH SLAB ELEVATIONS
C6	SOUTHWEST AND NORTHEAST APPROACH SLAB
C7	SOUTHEAST AND NORTHWEST APPROACH SLAB
C8	BOTTOM SLAB REINFORCEMENT
C9	TOP SLAB REINFORCEMENT
C10-C11	CULVERT WALL ELEVATIONS
C12	CULVERT CROSS SECTION
C13	NORTHWEST AND NORTHEAST WINGWALL
C14	SOUTHEAST WINGWALL AND RETAINING WALL
C15	SOUTHWEST WINGWALL AND RETAINING WALL
C16	WINGWALL DETAILS
C17	PARAPET DETAILS
C18-C19	SOIL BORING LOGS



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 Date 2/25/11
 MARK S. WYLIE
 ILLINOIS STRUCTURAL ENGINEER
 NO. 081-005002
 Exp. Date 11/30/12

NORTH BRANCH SUGAR CREEK
 BUILT 20... BY
 TOWN OF NORMAL
 MCLEAN COUNTY
 SECTION 07-00233-00-BR
 STATION 9+95.50
 STR. NO. 057-7841 LOADING HS20

NAME PLATE
 See Standard 515001

GENERAL PLAN AND ELEVATION
BROADWAY AVENUE OVER
NORTH BRANCH SUGAR CREEK
SECTION 07-00233-00-BR
NORMAL, ILLINOIS
MCLEAN COUNTY
STATION 9+95.50
STRUCTURE NO. 057-7841

DESIGNED	JCZ
CHECKED	MSW
DRAWN	JWK
CHECKED	MSW

DATE 02/25/11

FARNSWORTH GROUP, INC.

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

SHEET NO. C1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
19 SHEETS		07-00233-00-BR	MCLEAN	40	16
		SN 057-7841			CONTRACT NO. 91422
		FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT	