

WATERWAY INFORMATION TABLE (based on IDOT data)
(Major Culvert Crossing No. 1 - River Road - STA 24+81)

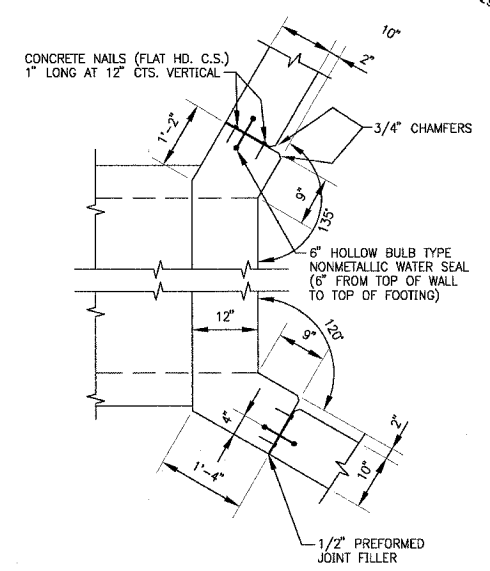
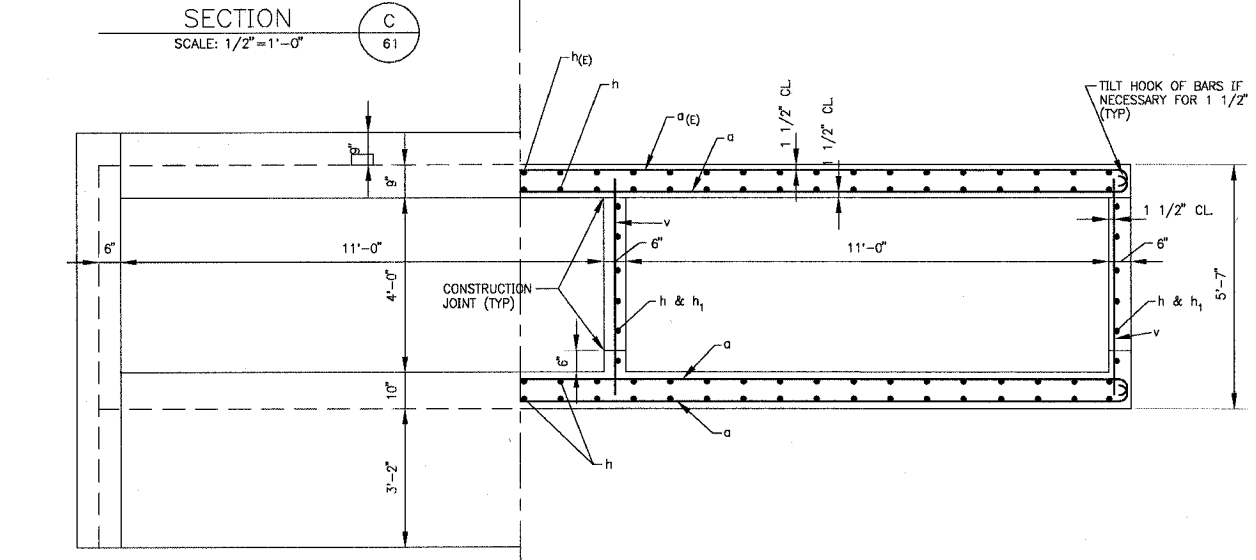
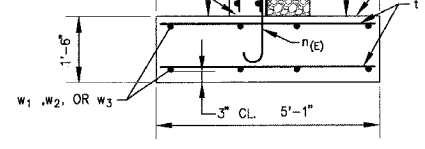
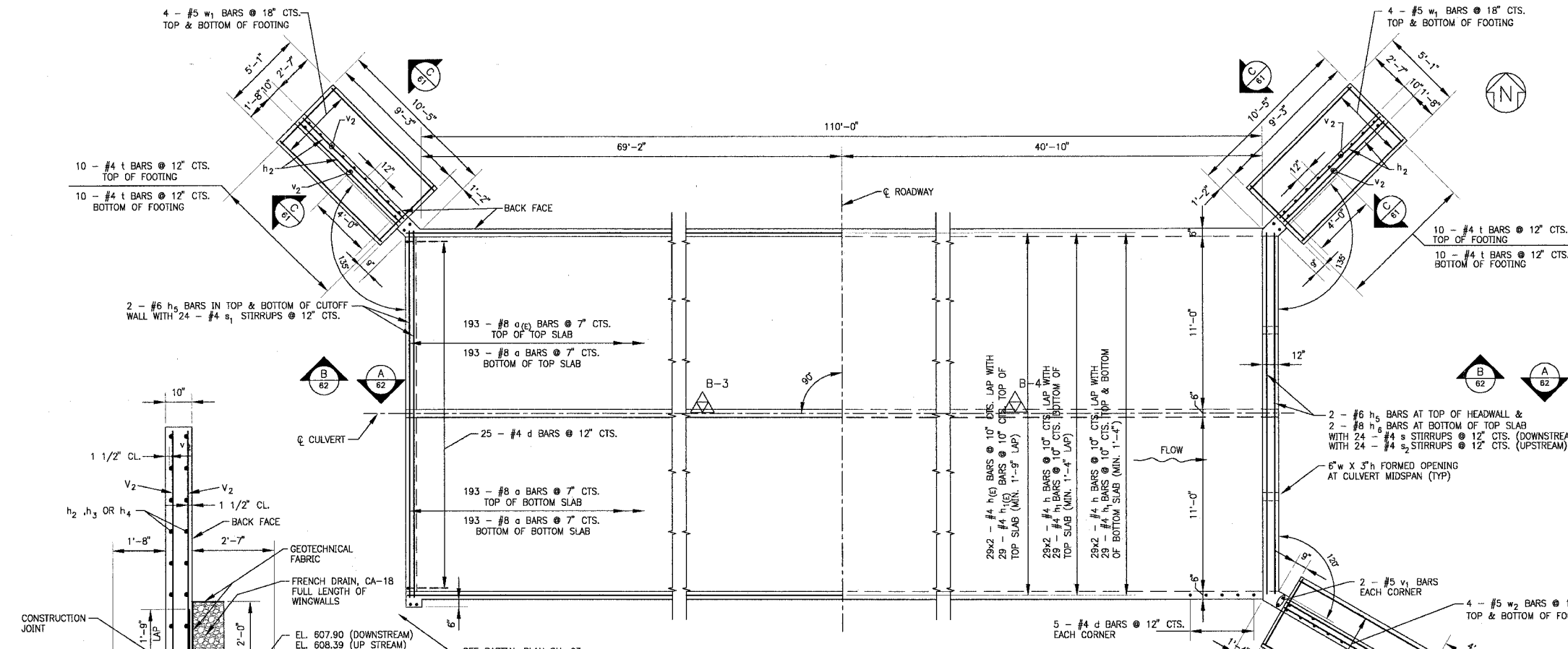
ROUTE: US Route 52 SECTION: RIVER ROAD (FHWA Sec. 11211)
COUNTY: WILL COUNTY
STREAM NAME: HANMEL CREEK

EXISTING CONDITIONS	PROPOSED CONDITIONS
STRUCTURE TYPE: BOX CULVERT	STRUCTURE TYPE: TWIN BOX CULVERTS
APPROXIMATE SIZE: 10 Feet x 3.5 Feet	APPROXIMATE SIZE: 2-11 Feet x 40 Feet
LOW CHORD ELEV.: NA	LOW CHORD ELEV.: NA
UPSTREAM INVERT ELEV.: 6108	UPSTREAM INVERT ELEV.: 6108
DOWNSTREAM ELEV.: 6106	DOWNSTREAM ELEV.: 6103

Drainage Area = 1.9 Square Miles
Proposed Low Grade Elev. = 615.59
Exist. Low Grade Elev. = 615.32
River Road STA 56+00
Mix Recorded HWLE = 619.0

Hood	Frequency	Discharge (cfs)	Waterway Opening (sq ft)		Natural HWLE	Created Head		Headwater Elevation	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
	10-year	249	37 sq ft.	88 sq ft.	614.9	0.9	0.0	615.8	614.8
DESIGN	50-year	445	37 sq ft.	108 sq ft.	615.8	0.5	0.2	616.3	616.0
BASE	100-year	550	37 sq ft.	112 sq ft.	616.0	0.5	0.3	616.5	616.3
	500-year	875	37 sq ft.	121 sq ft.	616.4	0.5	0.4	616.9	616.8
OVERCLOSING	8-year	200	37 sq ft.	—	NA	NA	NA	615.3	615.6

- Determined by removing the existing culverts from the Existing HEC-2 Analysis.
- Datum Correlation: Boxer & Woodman survey data adjusted by -1.12 feet to match FHWA reference mark datum.
- If there is overtopping the area above the roadway elevation is added to the waterway opening because the Natural HWLE is above the roadway elevation.



CONSTRUCTION SPECIFICATIONS

PERFORM WORK IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2002, SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2004 AND INSERTED SPECIAL PROVISIONS UPDATED MAY 6, 2004.

DESIGN STRESSES

$f_y = 60,000$ P.S.I.
 $f_c = 3,500$ P.S.I.

ALLOWABLE NET SOIL BEARING PRESSURE = 2,500 P.S.F. MINIMUM

LOADING HS20-44

ALLOW 50 LB/SF FOR FUTURE WEARING SURFACE

NOTES:

- SEE GENERAL NOTES ON SHEET 58
- REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.
- BARS INDICATED THUS 12x4 - #5 ETC. INDICATES 12 LINES OF BARS WITH 4 LENGTHS PER LINE.

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CONSULTANTS	REV. NO.	DATE	DESCRIPTION
	1	12-21-04	PER IDOT REVIEW
	2	4-5-05	

DRAWING FILE: BOXCULV-3.DWG
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VILLAGE OF SHOREWOOD, ILLINOIS
U.S. ROUTE 52 IMPROVEMENTS

RIVER ROAD
BOX CULVERT @ STA. 55+48.46
PLAN AND DETAILS

DESIGNED BY	SCALE
BAB	AS NOTED
DRAWN BY	PROJECT NO.
DEK	010665
CHECKED BY	SHEET NO.
MHY	61 OF 85
DATE	
10-05-04	

Revised 4-5-05