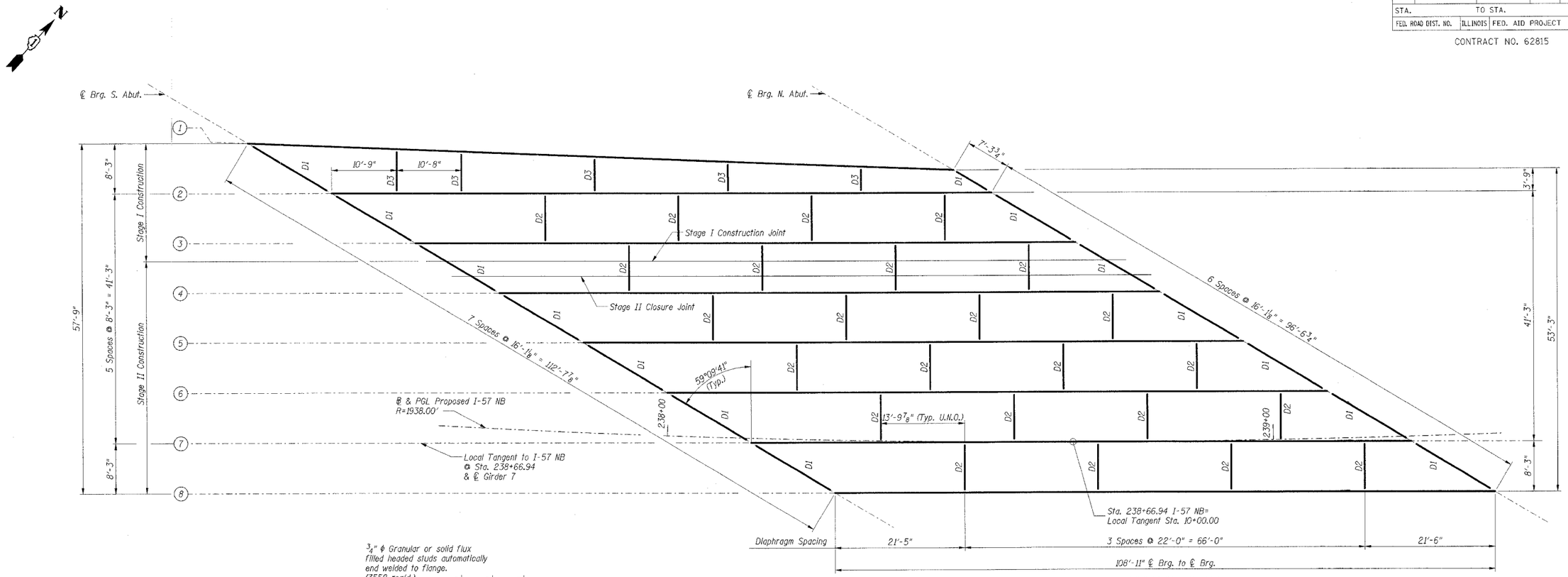
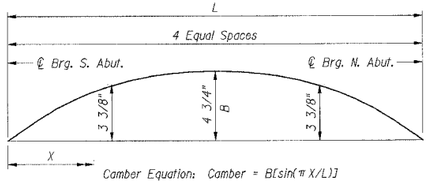
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	2323.1F	COOK	011	9
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62815



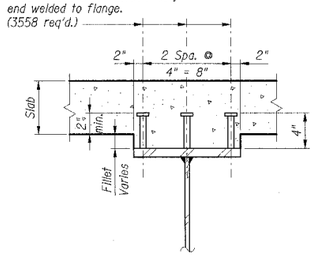
FRAMING PLAN

Dimensions relative to Local Tangent



Camber Equation: Camber = B[sin(π X/L)]

CAMBER DIAGRAM



SHEAR CONNECTOR DETAIL

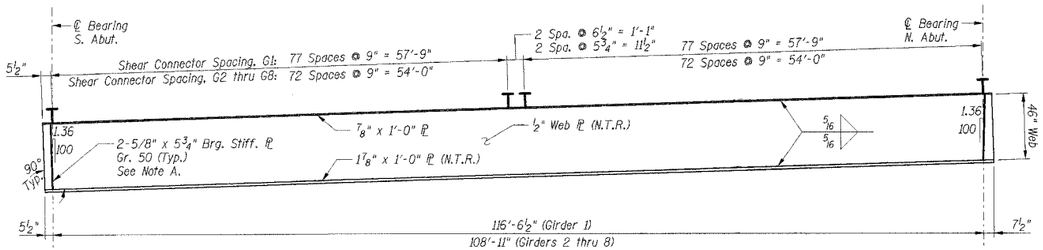
*TOP OF WEB ELEVATIONS		
Girder	℄ Bearing South Abut.	℄ Bearing North Abut.
1	11.17	14.73
2	12.01	15.13
3	12.85	16.00
4	13.67	16.85
5	14.51	17.71
6	15.39	18.60
7	16.25	19.46
8	17.10	20.31

*For Fabrication Use Only

BEARING SEAT ELEVATIONS		
Girder	South Abut.	North Abut.
1	6.94	10.26
2	7.78	10.65
3	8.63	11.53
4	9.45	12.38
5	10.29	13.24
6	11.16	14.12
7	12.02	14.99
8	12.88	15.83

Note A, to SHOP:
Bearing stiffeners are shown with a 1.36:100 tilt away from vertical for the zero-load condition. Bearing stiffeners shall be vertical in the final condition which includes deflection due to weight of steel and deck concrete.

Note B, to FIELD:
To fit up the steel, the Contractor shall anticipate the need to pull the tops of girders out of plumb. The tops of girders shall be pulled toward the east at the south abutment and toward the west at the north abutment. In conjunction, the end diaphragms shall be anticipated to fit up in a tilted position, with their tops toward the abutment backwall. Under steel self weight, the girder webs at centerline of bearing are predicted to have a tilt normal to the plane of the web of 1:50. The end diaphragms are predicted to have a tilt normal to the vertical plane through centerline of bearing of 1:40.



GIRDER ELEVATION

Notes:

1. All Structural Steel shall be AASHTO M 270 Grade 50 except diaphragms, diaphragm connection plates, and fill plates which may be AASHTO M 270 Grade 36.
2. N.T.R. indicates steel subject to Supplemental Requirements for Notch Toughness (Zone 2).
3. For Diaphragm and Bearing Stiffener details see Sheet S-8.
4. Diaphragms D2 crossing stage construction line between girders 3 and 4 shall be installed according to Note A on Sht. S-8.
5. Structural Steel shall be fabricated and erected under separate contracts and shall be paid for according to the Special Provisions Furnishing Structural Steel and Elastomeric Bearings and Erecting Structural Steel and Elastomeric Bearings and Sections 503 and 505 of the Standard Specifications.
6. Stud Shear Connectors furnished and installed by the erection Contractor as part of the erection contract.

SHT. S-7

REVISIONS	
NAME	DATE
TCU	11/23/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 57 (INTERSTATE 57)
BEAM & BEARING FABRICATION
I-57 NB OVER WB CONNECTOR
EXISTING SN 016-0072, PROPOSED SN 016-2852
STA. 238+73.54, COOK COUNTY, SECTION 2323.1F
FRAMING PLAN

DRAWN BY: VV
DATE: 10/20/05 CHECKED BY: RDS

TENG
TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
205 N. MICHIGAN AVE., CHICAGO, IL 60601
TELEPHONE 312.616.0000

..\EXCOMDP.DGN ..\RDWDDYSC.DGN ..\ALTDDYS.DGN ..\EXFDDWBS.DGN ..\SBLOWBB.DGN ..\SBLOWBB4.DGN ..\TSLOCVVT.DGN ..\BRGBRDER.DGN UDETC
11-25-2005, 11:44:44 T:\DOCUMENTS\93686\STRUCTURE\FRPDDW.DGN