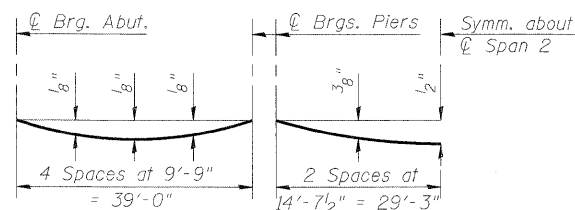


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	-	KANE	545	320
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

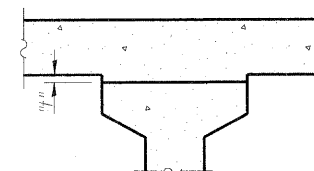
Contract # 63074

SHEET SD- 5  
OF 34 SHEETS



**DEAD LOAD DEFLECTION DIAGRAM**  
(Includes weight of concrete, excluding beams).

Note:  
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.



To determine "f": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown below, minus slab thickness, equals the fillet heights "f" above top flanges of beams.

**FILLET HEIGHTS**

**BEAM 1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk S. Abut	275+68.80	-53.37	753.76	753.76
⊙ Brg S. Abut	275+70.00	-53.31	753.76	753.76
A	275+79.66	-52.81	753.80	753.81
B	275+89.33	-52.37	753.86	753.87
C	275+98.99	-52.00	753.92	753.93
⊙ Brg Pier 1 Span 1	276+07.46	-51.72	753.98	753.98
⊙ Brg Pier 1 Span 2	276+09.39	-51.67	754.00	754.00
D	276+19.07	-51.42	754.09	754.11
E	276+28.75	-51.24	754.18	754.22
F	276+38.43	-51.12	754.29	754.33
G	276+48.11	-51.06	754.41	754.45
H	276+57.79	-51.07	754.54	754.56
⊙ Brg Pier 2 Span 2	276+65.53	-51.12	754.65	754.65
⊙ Brg Pier 2 Span 3	276+67.47	-51.14	754.68	754.68
J	276+77.15	-51.27	754.84	754.84
K	276+86.83	-51.46	755.00	755.01
L	276+96.50	-51.71	755.17	755.18
⊙ Brg N. Abut	277+04.97	-51.99	755.33	755.33
Bk N. Abut	277+06.18	-52.03	755.36	755.36

**BEAM 2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk S. Abut	275+68.36	-44.97	753.59	753.59
⊙ Brg S. Abut	275+69.57	-44.90	753.59	753.59
A	275+79.28	-44.40	753.63	753.64
B	275+88.99	-43.96	753.69	753.69
C	275+98.71	-43.59	753.75	753.76
⊙ Brg Pier 1 Span 1	276+07.22	-43.31	753.81	753.81
⊙ Brg Pier 1 Span 2	276+09.17	-43.25	753.83	753.83
D	276+18.89	-43.01	753.92	753.94
E	276+28.62	-42.83	754.01	754.05
F	276+38.35	-42.71	754.12	754.16
G	276+48.09	-42.65	754.24	754.28
H	276+57.82	-42.65	754.37	754.39
⊙ Brg Pier 2 Span 2	276+65.61	-42.70	754.49	754.49
⊙ Brg Pier 2 Span 3	276+67.55	-42.72	754.52	754.52
J	276+77.28	-42.85	754.67	754.68
K	276+87.01	-43.04	754.83	754.84
L	276+96.74	-43.30	755.01	755.01
⊙ Brg N. Abut	277+05.25	-43.58	755.17	755.17
Bk N. Abut	277+06.46	-43.62	755.20	755.20

**BEAM 3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk S. Abut	275+67.92	-36.56	753.42	753.42
⊙ Brg S. Abut	275+69.14	-36.50	753.42	753.42
A	275+78.89	-35.99	753.46	753.47
B	275+88.66	-35.55	753.52	753.52
C	275+98.43	-35.18	753.58	753.58
⊙ Brg Pier 1 Span 1	276+06.98	-34.90	753.64	753.64
⊙ Brg Pier 1 Span 2	276+08.94	-34.84	753.66	753.66
D	276+18.72	-34.59	753.75	753.77
E	276+28.50	-34.41	753.84	753.88
F	276+38.28	-34.29	753.95	754.00
G	276+48.06	-34.23	754.07	754.11
H	276+57.85	-34.24	754.21	754.22
⊙ Brg Pier 2 Span 2	276+65.68	-34.29	754.32	754.32
⊙ Brg Pier 2 Span 3	276+67.63	-34.30	754.35	754.35
J	276+77.42	-34.44	754.50	754.51
K	276+87.20	-34.63	754.67	754.68
L	276+96.97	-34.89	754.84	754.85
⊙ Brg N. Abut	277+05.53	-35.16	755.01	755.01
Bk N. Abut	277+06.75	-35.21	755.03	755.03

Note  
1. For Deck Elevation Plan see sheet SD-4.  
2. Stations and Offsets are taken from ⊙ Proposed IL 25/Dunham Road

DESIGNED	AJK
CHECKED	HMA
DRAWN	AJK
CHECKED	DMC

**benesch**  
alfred benesch & company  
Engineers • Surveyors • Planners  
205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0450  
Job # 3944

**DECK ELEVATIONS 1 OF 3**  
**IL 25/DUNHAM ROAD OVER THE**  
**EAST BRANCH OF BREWSTER CREEK**  
**F.A.P. 360 - SEC. 06-00214-15-BR**  
**KANE COUNTY**  
**STATION 276+36.96**  
**STRUCTURE NO. 045-2032**

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