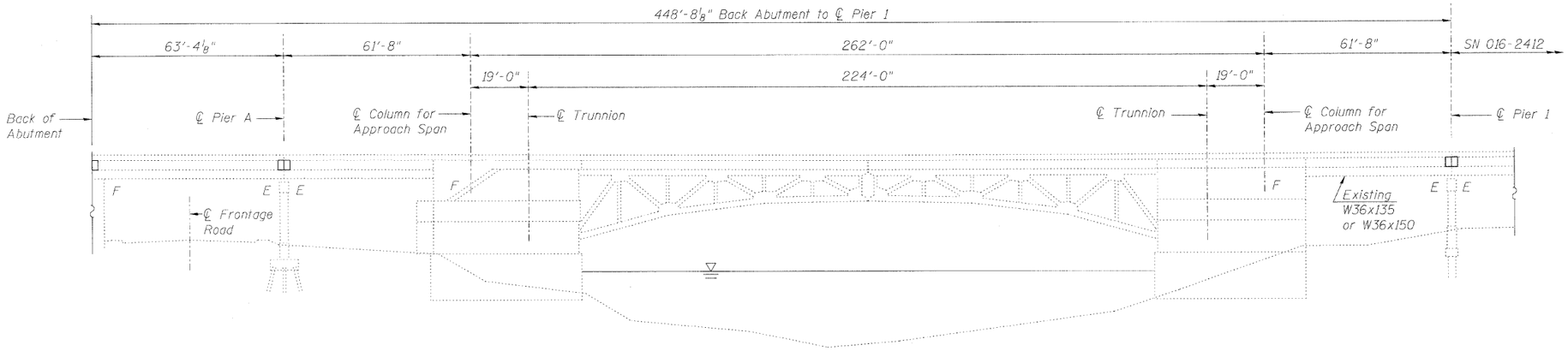
Existing Structure: S.N. 016-0991 built in 1966 as F.A.I. 55, Section 207-0708.1-CF. Existing structure is a double leaf steel bascule bridge with a 4 1/4" welded steel grid deck, filled with concrete. Approach spans have steel stringers and reinforced concrete deck. In 1989, the expansion joints at the abutment and Pier A were replaced, the substructure concrete was repaired, a 2" concrete overlay was placed on the approaches and a 3/8" epoxy overlay was placed on the main span. In 1999, the main span deck was repaired and the epoxy overlay was replaced. Bridge length is 448'-8 1/8" from back of abutment to ℄ pier 1. The abutment, Pier A and Pier 1 are reinforced concrete. Pier A and Pier 1 consist of 3 circular columns with a continuous cap beam. The abutment is counterfort type. Stage Construction shall be utilized to maintain traffic during construction.

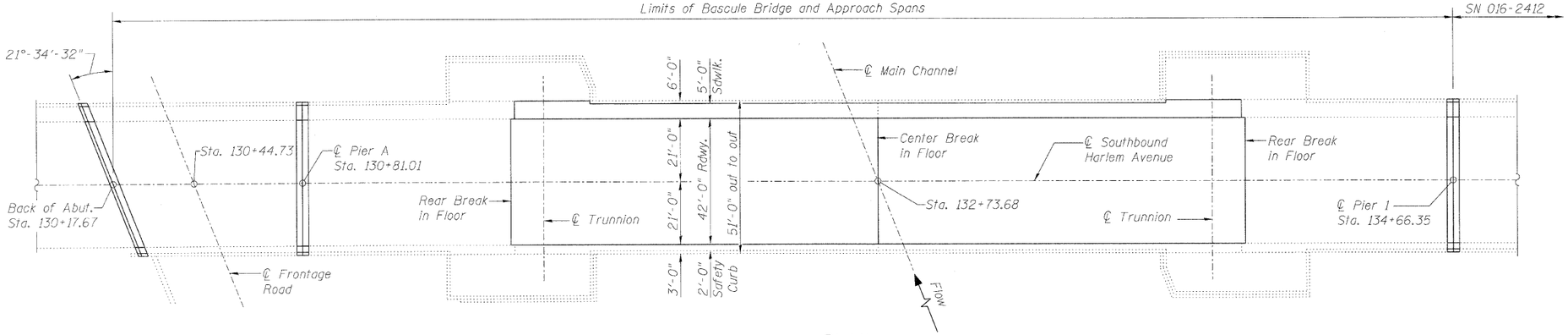
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCOPE OF WORK

1. Remove and replace polymer epoxy overlay within main bascule spans.
2. Reconstruct expansion joints at Abutment, Pier A and Pier 1.
3. Repair deck slab on approach spans.
4. Apply Concrete Sealer to top of concrete deck on approach spans and top and inside faces of parapets and sidewalk/curb.
5. Repair deteriorated concrete on Pier A.
6. Jack and remove existing Pier A bearings and replace with elastomeric bearings.
7. Clean Rear Break Gutters.
8. Power wash all steel and concrete surfaces in Tender Houses and remove debris.
9. Pump water and remove debris from pits.
10. Repair components of the catwalk and stairwell in the North Tender House.
11. Re-shim/repair Center Lock.



ELEVATION



PLAN

INDEX OF SHEETS

LICENSED STRUCTURAL ENGINEER ★ MICHAEL T. HALEY 81-5991 CHATHAM ★ STATE OF ILLINOIS

Michael J. Haley 5/5/10

Michael T. Haley — Date
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2010

DESIGN STRESSES

FIELD UNITS

New Construction

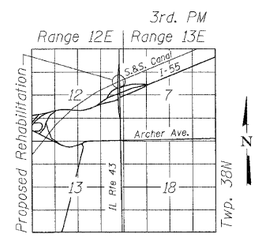
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (Structural Steel) (M270 Gr. 36)

DESIGN SPECIFICATIONS

(New Construction)
2002 AASHTO "Standard Specifications for Highway Bridges", 17th Edition

LOADING HS 20-44

(Original Construction)



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
SB IL RTE 43 (HARLEM AVE) OVER
SANITARY & SHIP CANAL
F.A.P. RTE 348 - SECTION (0708.1&2323.5)B
COOK COUNTY
STATION 132+73.68
STRUCTURE NO. 016-0991

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: ADB | Checked By: MTH | Drawn By: AJF
Date: March, 2010 | Files: 016-0991.dgn

SHEET NO. 1
14 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	(0708.1&2323.5)B	COOK	47	29
		CONTRACT NO. 60D69		
	ILLINOIS	FED. AID PROJECT		