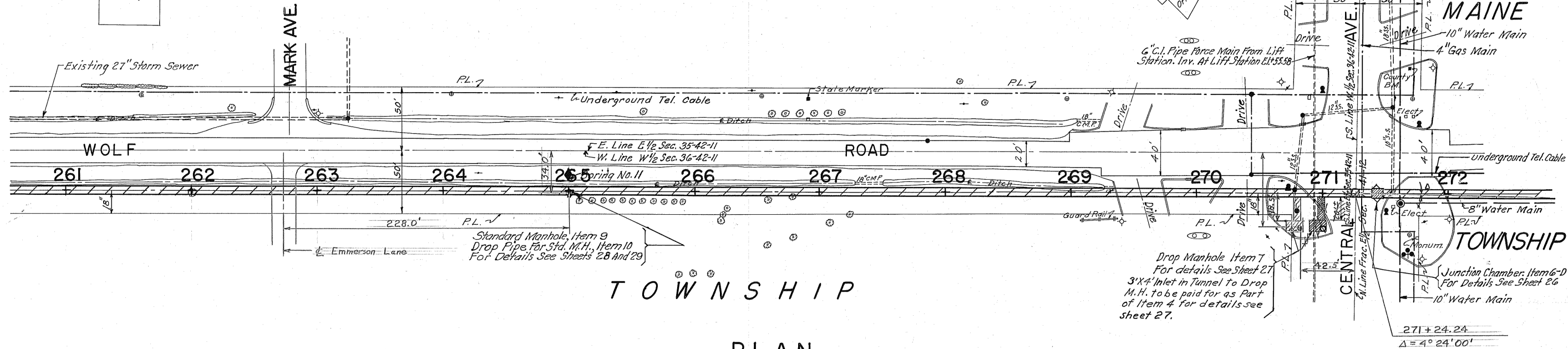


Alternative	Conceptual Project Cost ¹	Sewer Construction Notes	Restoration Notes
Open Cut	\$2,300,000	Average open cut depth is ±20' to invert. According to the Cook County and IDOT jurisdictional maps, this section of Central is locally owned so the installation could potentially be under the northern westbound lane to avoid tree removals, water main replacement, and light pole removal and replacement.	Assume 12' wide full depth patch the length of the project. Assume 8" patch on Lowden and 14" patch on Central.
Directional Drill	\$1,800,000	A minimum slope of 1% is needed for long run directional drilling. This slope would result in 15' deeper connection to the MWRD connection structure, below the drop chamber resulting in a much higher connection cost. Directional drilling equipment would need to sit in excavated pits, similar to a bore and jack operation.	Assume full depth patching at pit locations, one at each end, and one at the Lowden / Central intersection.
Piloted Boring	\$1,915,000	The process would be similar to Directional Drill, but the slope requirement is relaxed back to the 0.23%. Pipe material for bored sections is steel.	Assume full depth patching at pit locations, one at each end, and one at the Lowden / Central intersection.

Notes
 1: Conceptual cost includes construction cost with a 25% contingency, and an assumed 15% engineering cost.

Building

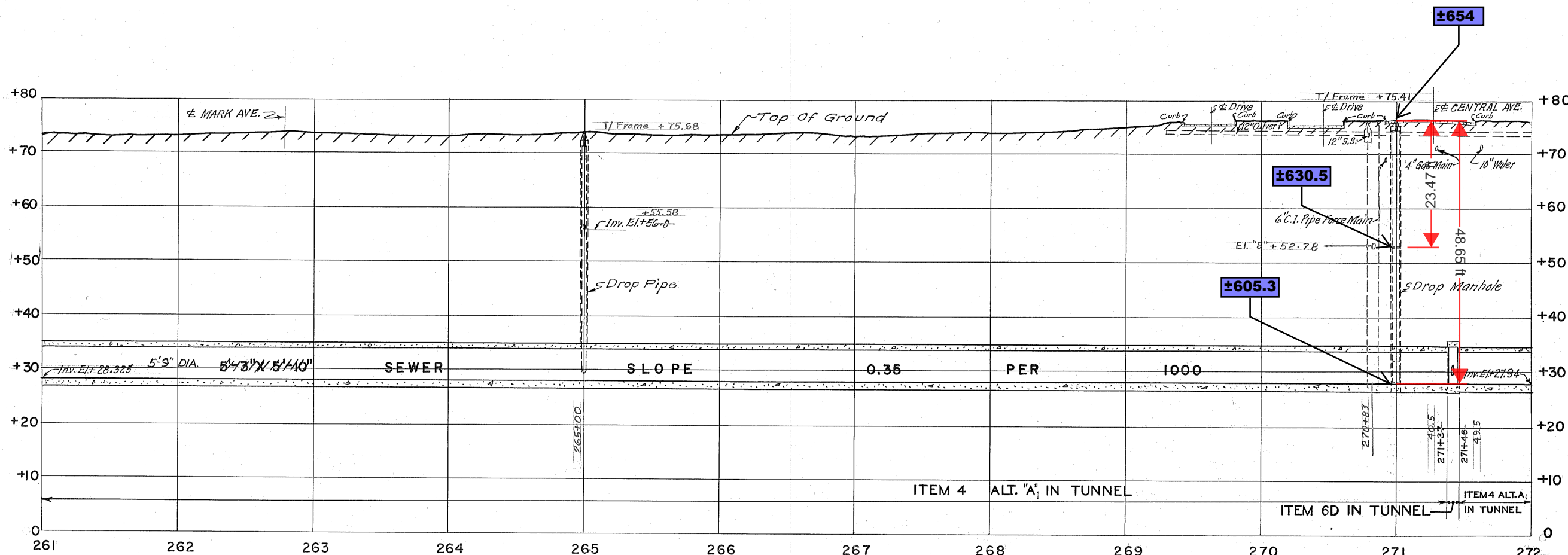
W H E E L I N G



T O W N S H I P

PLAN

STA. 261+00 TO STA. 272+00



PROFILE

STA. 261+00 TO STA. 272+00

Plan: 1" = 40'-0"
 Profile { Hor. 1" = 40'-0"
 Vert. 1" = 10'-0"

REVISION OF PLAN		
DATE	DESCRIPTION	BY
2-1-63	Drop M.H. relocated 20' West, at Sta. 271+00	L.Z.

THE METROPOLITAN SANITARY DISTRICT
 OF GREATER CHICAGO
 APPROVED
 JAN 17 1963
 AS WORKING PLAN.
 ENGINEERING DEPT.
 SEWER SECTION

Corrected by *J. W. [Signature]*
 Engr. of Sewer Design
 Approved by *Harold E. Anderson*
 Assistant Chief Engineer
 Approved by *E. A. [Signature]*
 Deputy Chief Engineer

THE METROPOLITAN SANITARY DISTRICT
 OF GREATER CHICAGO
 UPPER DES PLAINES INTERCEPTING SEWER
 CONTRACT NO. 14 - A
 PLAN AND PROFILE

BUILT AS SHOWN,
 EXCEPT AS NOTED
G. J. Coughlin
 PROJECT ENGINEER

DRAWN BY *M. Yrankin*
 TRACED BY *P. De Salvo*
 CHECKED BY *J. Mirza*

Note "A" on Sheet No. 23 applies to this Sheet.

Chicago City Datum

E. 142796

DECEMBER 1962