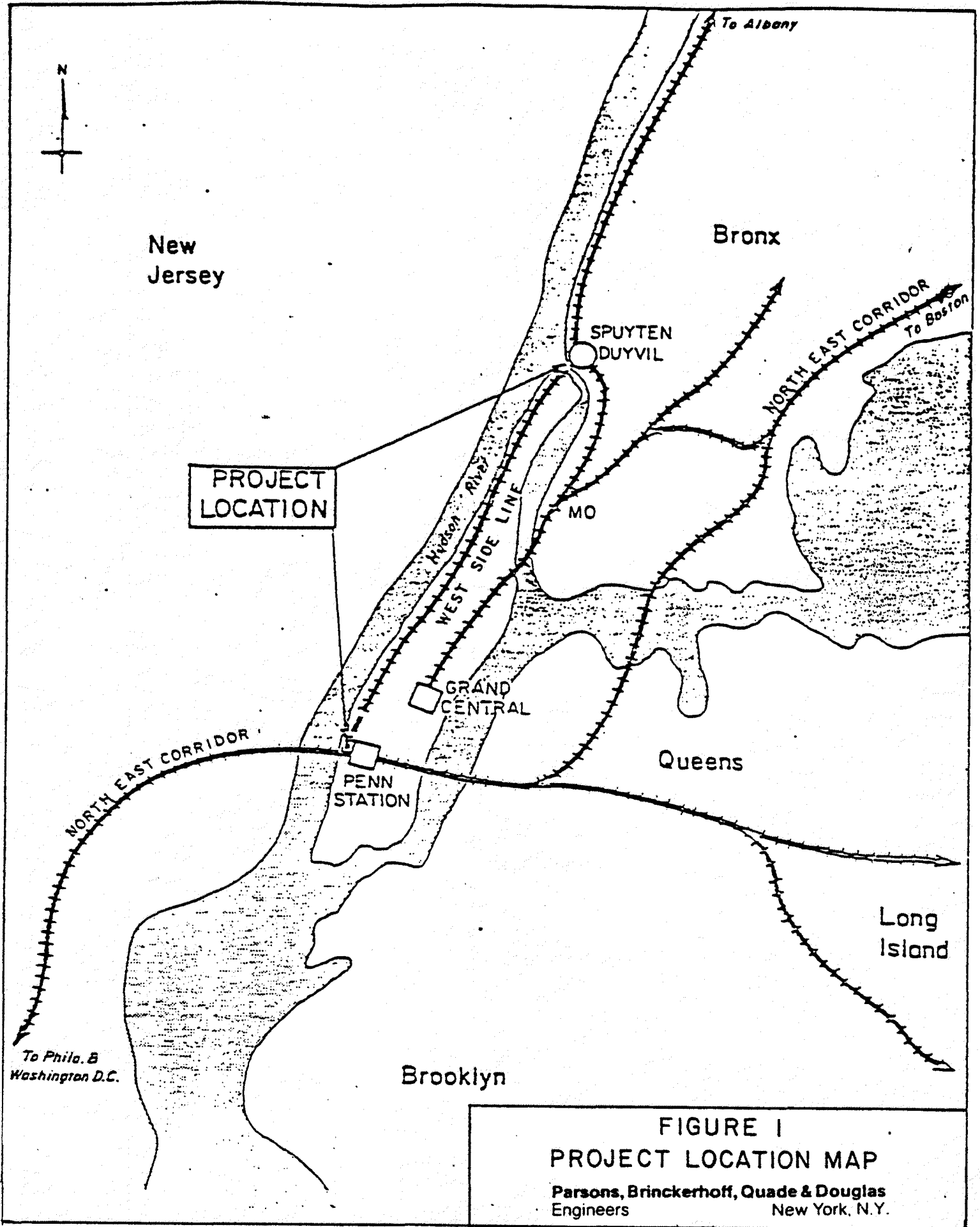
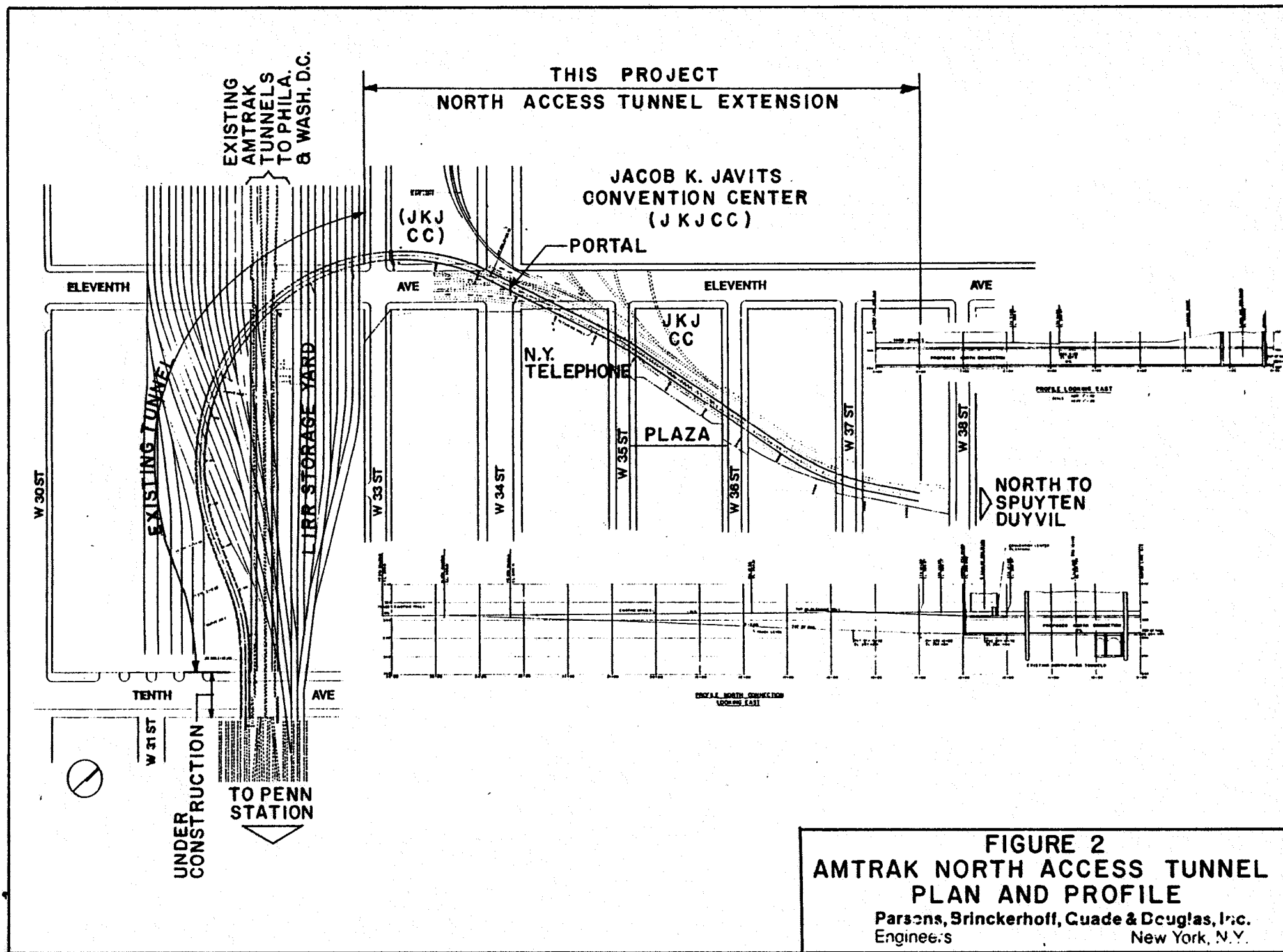
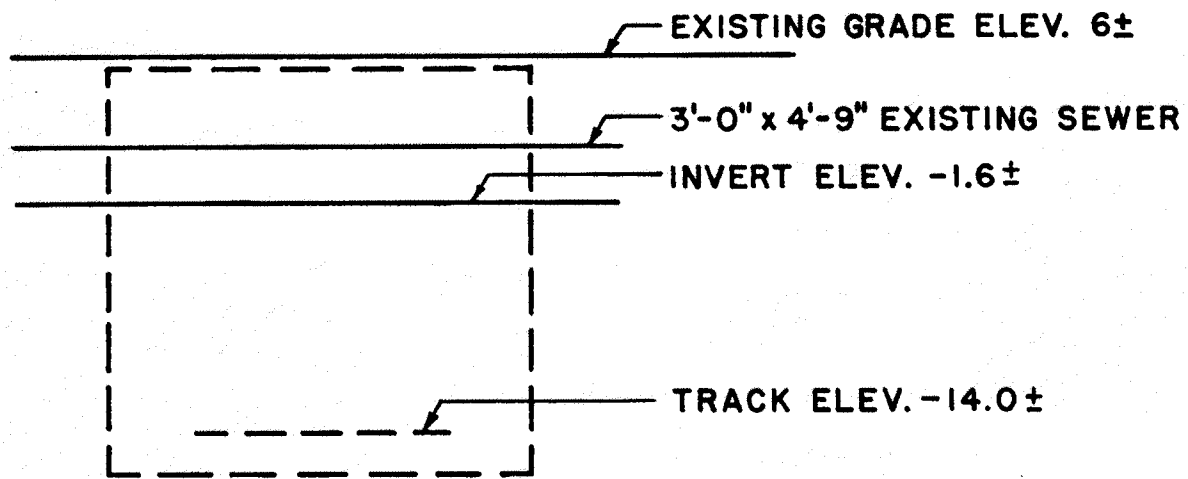
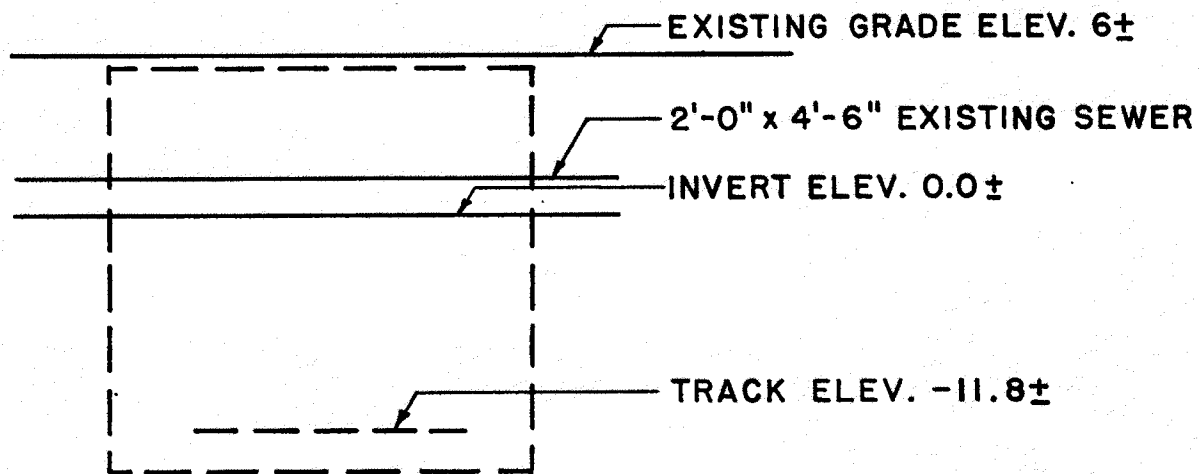








SEWER CROSSING AT WEST 33rd STREET
SECTION LOOKING SOUTH
NTS



SEWER CROSSING AT WEST 34th STREET
SECTION LOOKING SOUTH
NTS

FIGURE 3
AMTRAK NORTH ACCESS TUNNEL
TUNNEL / SEWERS INTERFERENCE

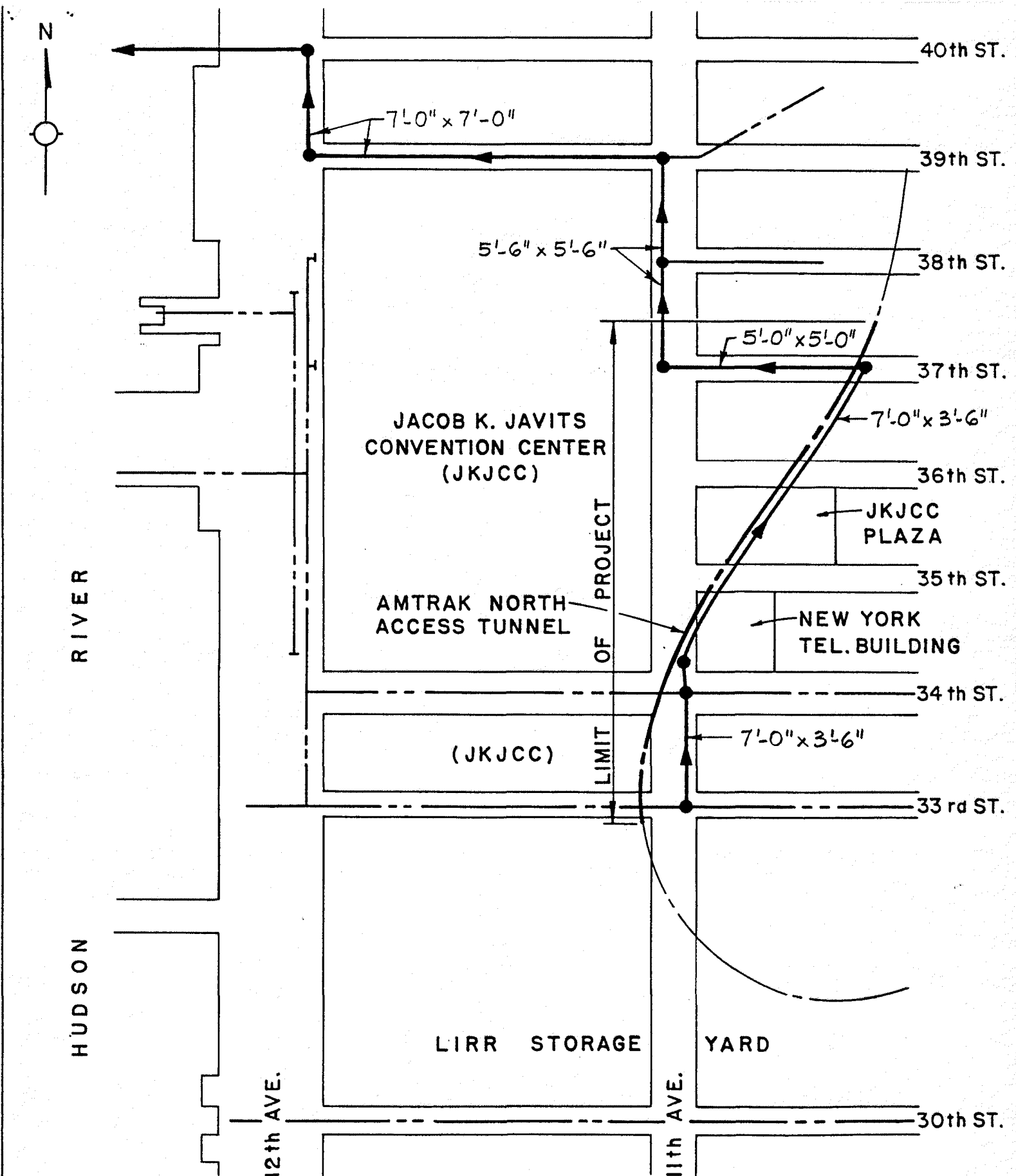


FIGURE 4
AMTRAK NORTH ACCESS TUNNEL
SEWER RELOCATION
ALTERNATIVE 1/ TO 40th ST.

Existing Sewer ———
 Proposed Sewer ———→
 Parsons Brinckerhoff Quade & Douglas, Inc.

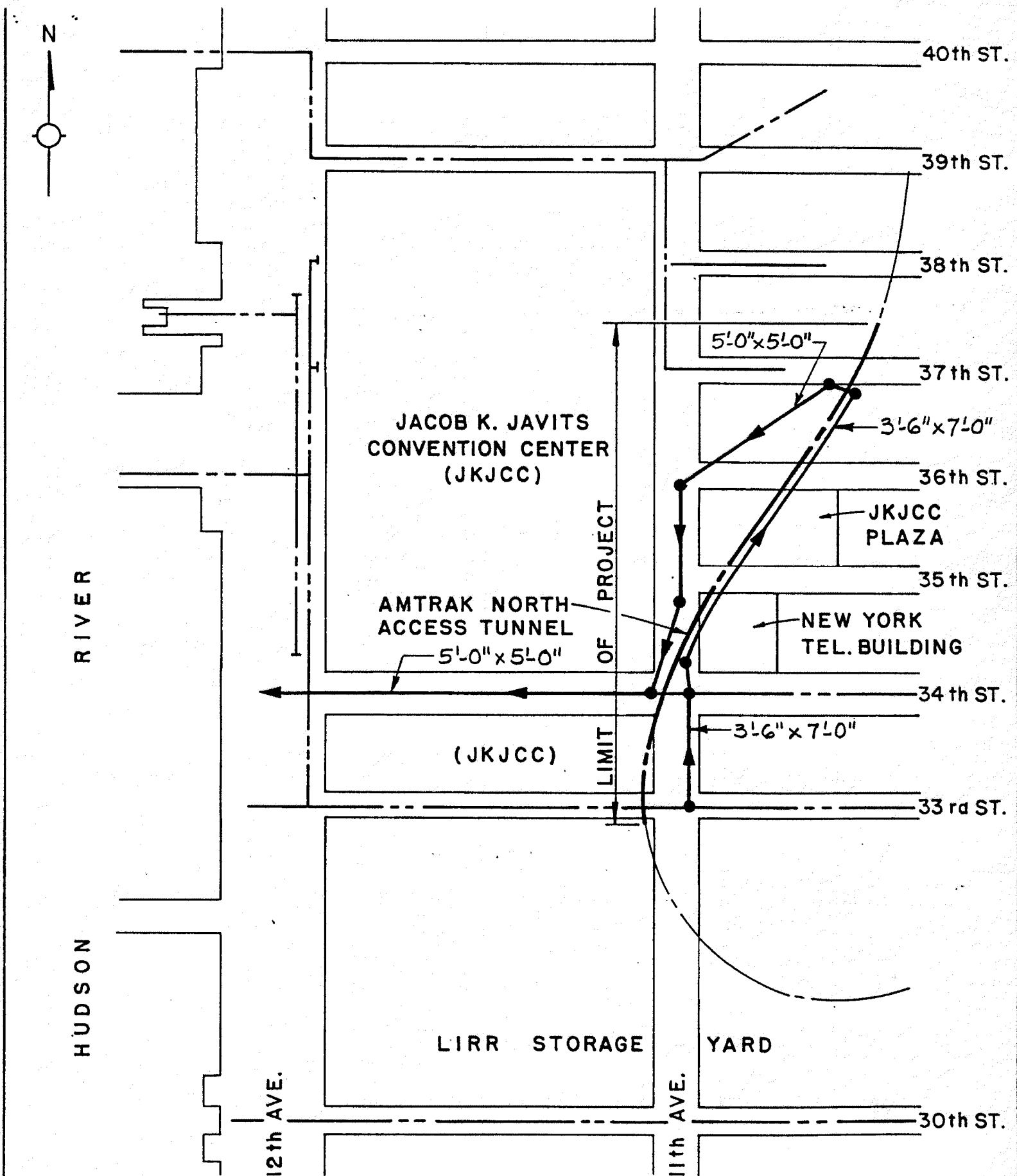


FIGURE 5
AMTRAK NORTH ACCESS TUNNEL
SEWER RELOCATION
ALTERNATIVE 2/TO 34th ST.

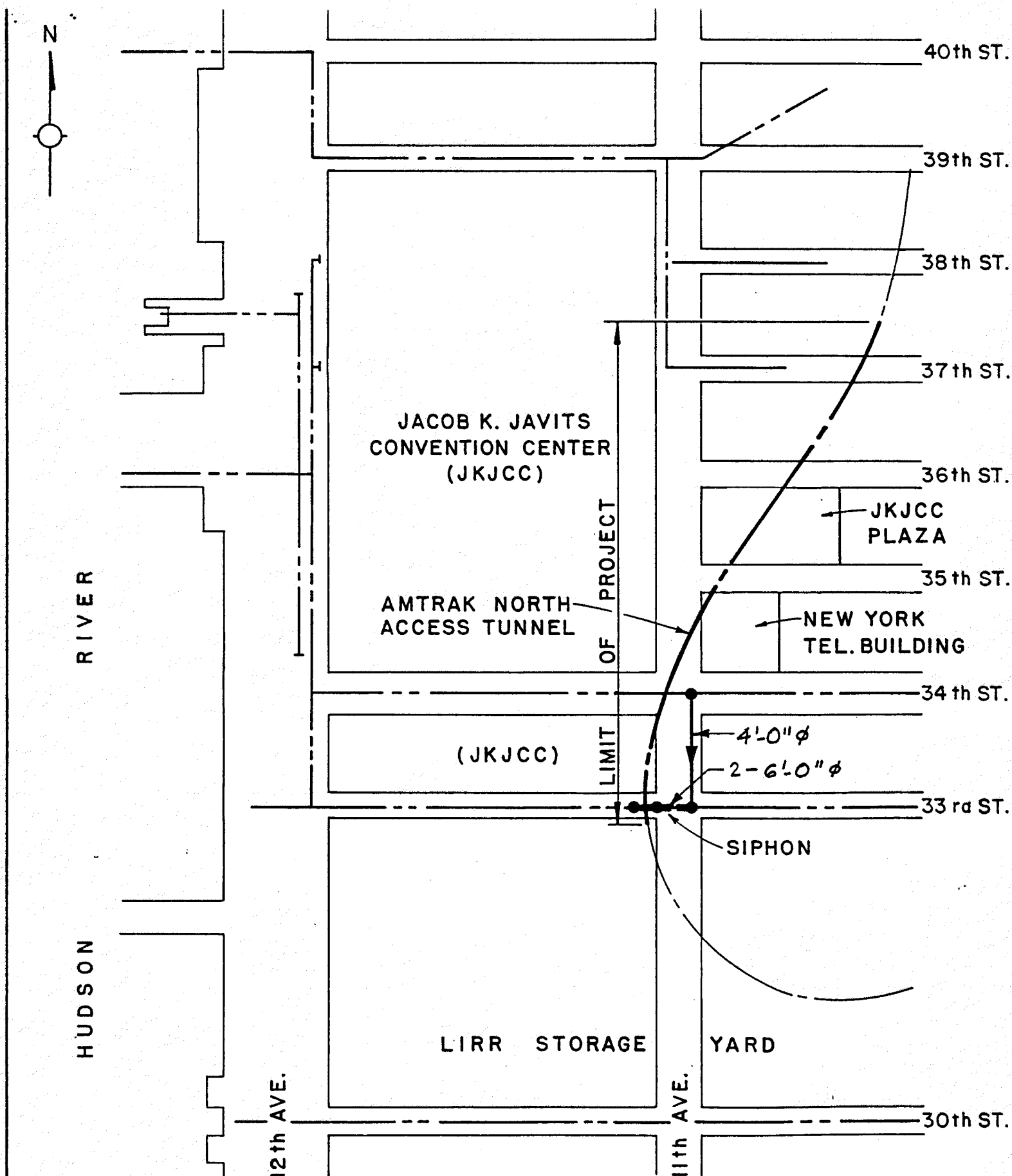


FIGURE 6
AMTRAK NORTH ACCESS TUNNEL
SEWER RELOCATION
ALTERNATIVE 3 / SIPHON 33rd ST.

Existing Sewer ———
Proposed Sewer ———→

Parsons, Brinckerhoff, Quade & Douglas, Inc.

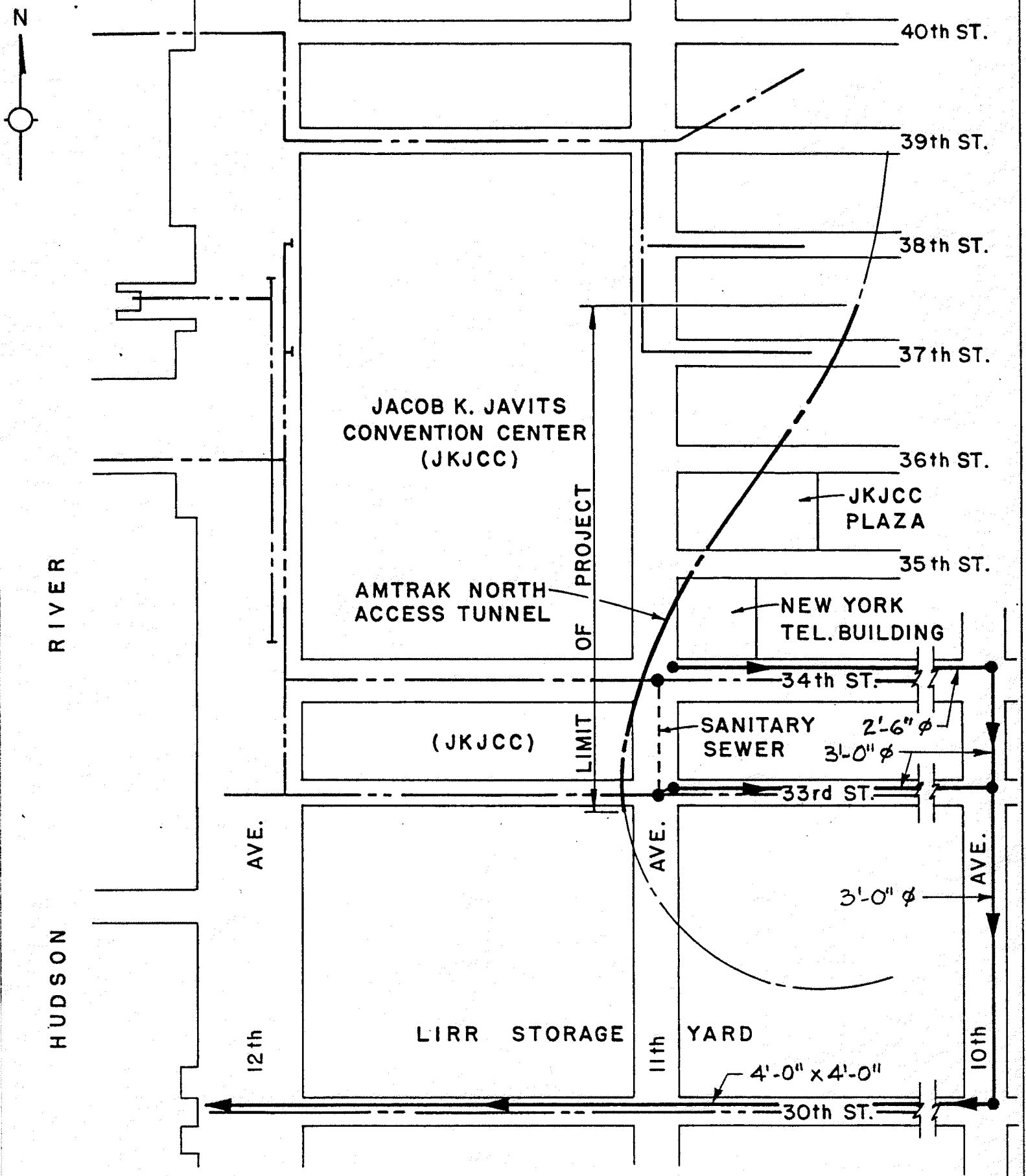


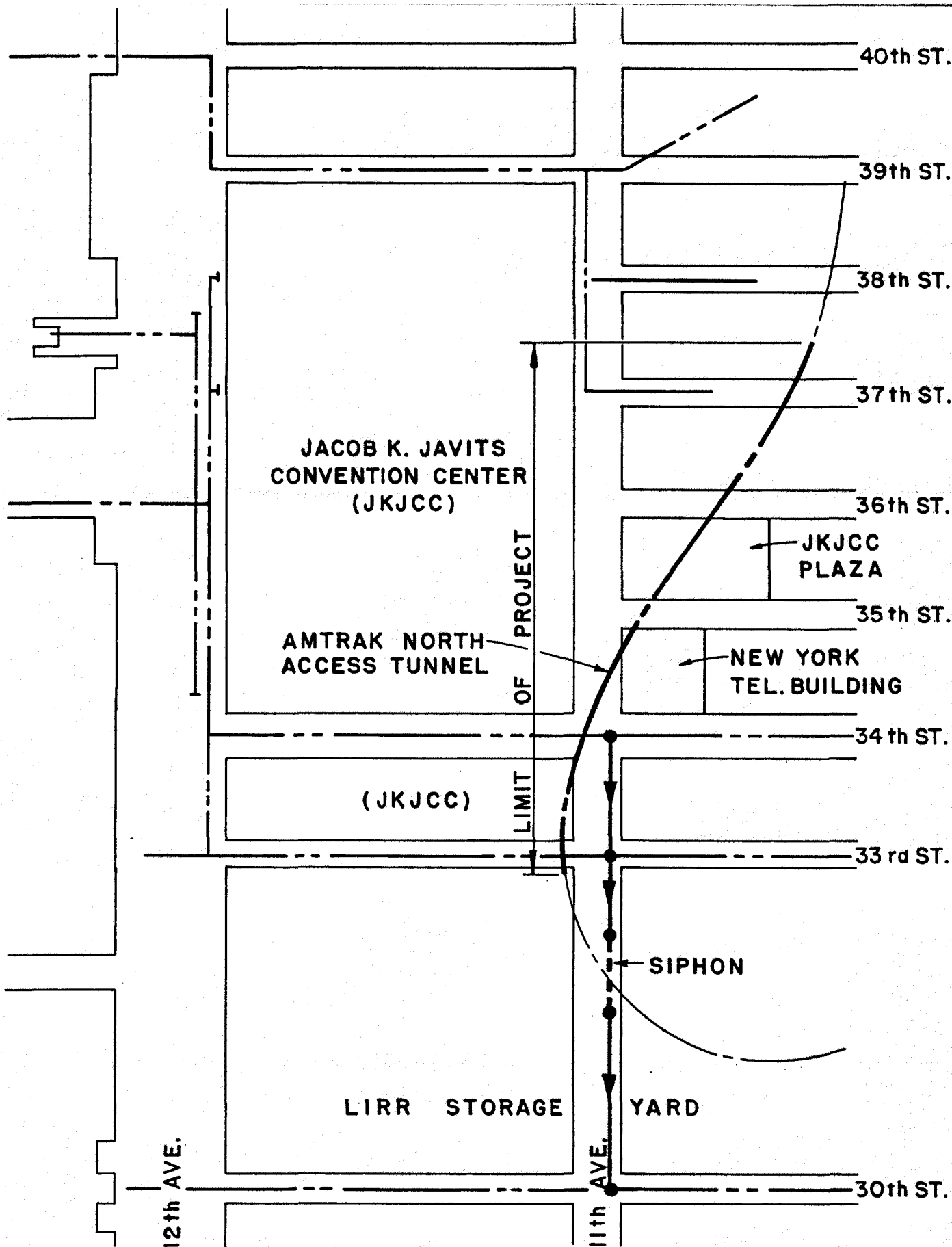
FIGURE 7
AMTRAK NORTH ACCESS TUNNEL
SEWER RELOCATION
ALTERNATIVE 4 / TO 30th ST. VIA 10th AVE.

Existing Sewer ———
 Proposed Sewer ———→
 Parsons Brinckerhoff Quade & Douglas, Inc.



RIVER

HUDSON



Existing Sewer ————
Proposed Sewer —————>

Parsons, Brinckerhoff, Guade & Douglas, Inc.

FIGURE 8
AMTRAK NORTH ACCESS TUNNEL
SEWER RELOCATION
ALTERNATIVE 5 / TO 30th ST. VIA 11th AVE.

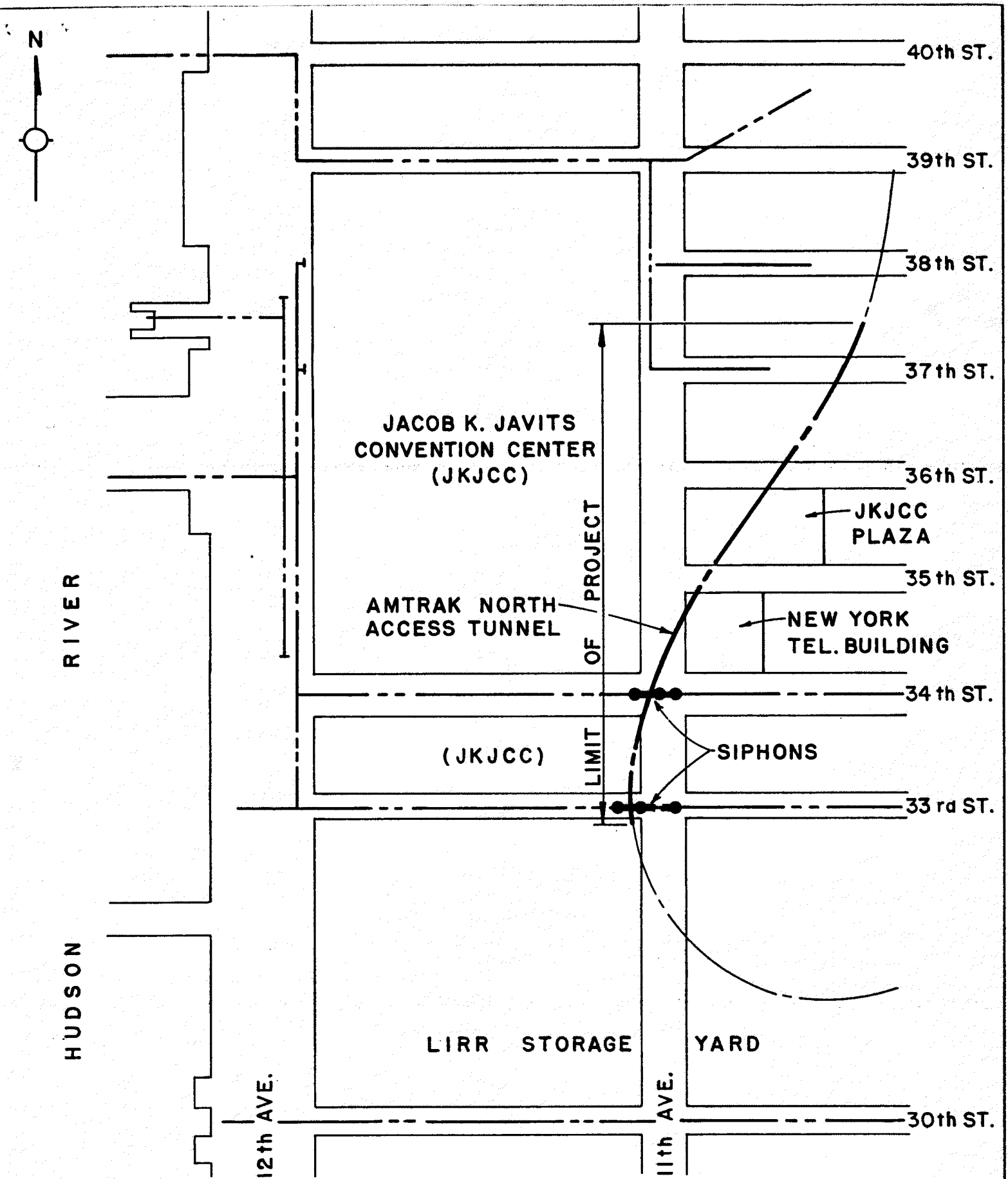


FIGURE 9
AMTRAK NORTH ACCESS TUNNEL
SEWER RELOCATION
ALTERNATIVE 6 / SIPHONS 33rd & 34th ST.

Existing Sewer — — — — —
 Proposed Sewer —————▶

Parsons, Brinckerhoff, Quade & Douglas, Inc.

TABLE 1

SUMMARY CHART OF FINDINGS

<u>Alternative</u>	<u>Total (6) Capital Cost (\$1000)</u>	<u>Under Pinning Cost (\$1000)</u>	<u>Annual Maintenance Cost (\$1000)</u>	<u>P.W. of Capital & Maintenance Cost</u>	<u>Major Constr. Disruption (Y or N)</u>	<u>Private Property Required (Y or N)</u>	<u>Basic Parameters</u>	
							<u>Length FT</u>	<u>App. Ave Depth FT</u>
1	11,800	600	(1)	11,800	y(2)	y(4)	4,200	13
2	8,000	1,200	(1)	8,000	y(3)	y(4)	3,130	7
3	2,100	270	16.0	2,400	N	N	150	30
4	12,700	-	30.0	13,700	y(5)	N	4,900	14

(1) No additional maintenance cost; considered part of normal maintenance provided by BOS for gravity sewers.

(2) Potentially major disruptions to Convention Center Operations because to traffic disruption on 39th Street, 11th Avenue and 12th Avenue.
Possible disruptions to Lincoln Tunnel Operations

(3) Potentially major disruptions to Convention Center Operations because of traffic impacts along 34th Street, and 12th Avenue at 34th Street.

(4) 2400 square feet in the Convention Center Plaza area

(5) Potentially major disruption to traffic along 10th Avenue and 34th Street between 10th and 11th Avenues.

(6) Total capital cost includes cost of underpinning