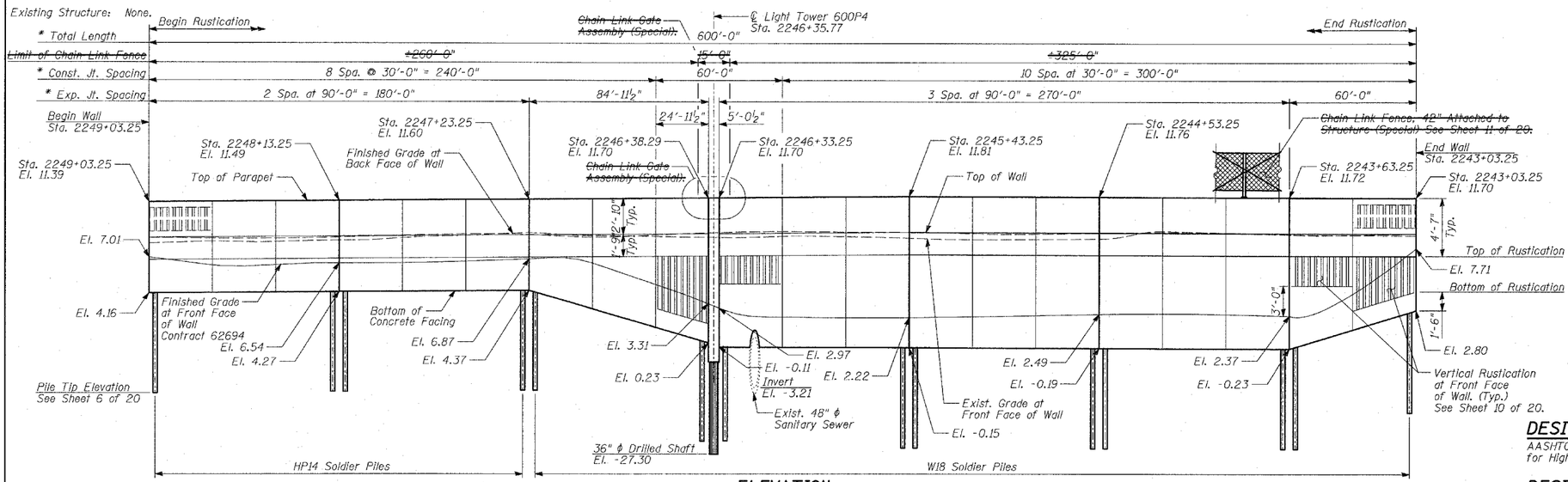
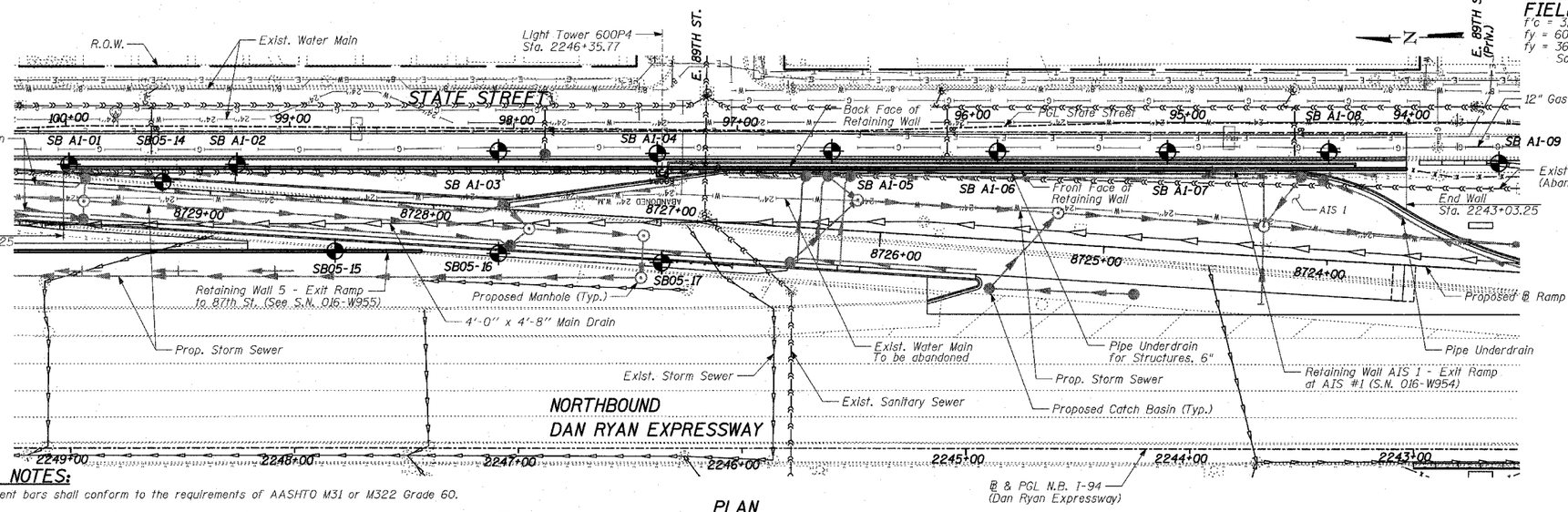
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	•	COOK	860	498
STA. 2200+00.00	TO STA. 2362+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• (1516.1, 1717 & 1818) R-8			62694	

Benchmarks: BM 3553 Set "+" northwest bolt of traffic signal/light base at northeast intersection of 87th St. and State St. El. 8.47

Existing Structure: None.



ELEVATION



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structure Excavation	CU YD	489
Concrete Structures	CU YD	272
Protective Coat	SQ YD	813
Rustication Finish	SQ FT	2,009
Stud Shear Connectors	EACH	792
Untreated Timber Lagging	SQ FT	3,463
Furnishing Soldier Piles (HP Section)	FOOT	627
Furnishing Soldier Piles (W Section)	FOOT	1,795
Reinforcement Bars, Epoxy Coated	POUND	36,320
Geocomposite Wall Drain	SQ YD	418
Pipe Underdrains for Structures, 6"	FOOT	600
Drilling and Setting Soldier Piles (in Soil)	CU FT	12,306
~~Chain Link Fence,42" Attached to Structure (Special)~~	~~FOOT~~	~~585~~
~~Chain Link Gate Assembly (Special)~~	~~EACH~~	~~1~~
Drilled Shaft in Soil 36"	FOOT	26

DESIGN SPECIFICATION

AASHTO 2002 Standard Specifications for Highway Bridges

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (M270 Grade 36) Soldier Piles

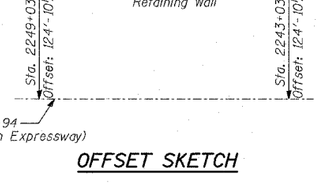
INDEX OF SHEETS

1. GENERAL PLAN
2. PLAN AND ELEVATION STA. 2249+03.25 TO STA. 2247+23.25
3. PLAN AND ELEVATION STA. 2247+23.25 TO STA. 2245+43.25
4. PLAN AND ELEVATION STA. 2245+43.25 TO STA. 2243+63.25
5. PLAN AND ELEVATION STA. 2243+63.25 TO STA. 2243+03.25
6. PILE LAYOUT, DETAILS & BILL OF MATERIAL
7. LIGHT TOWER 600P4 FOUNDATION DETAILS
8. LIGHT TOWER DETAILS
9. WALL CROSS SECTIONS & DETAILS
10. RUSTICATION DETAILS
~~11. CHAIN LINK FENCE, 42" ATTACHED TO STRUCTURE (SPECIAL)~~
~~12. GATE PLAN AND NOTES~~
~~13. GATE ELEVATIONS~~
~~14. GATE SECTIONS~~
~~15. GATE SECTIONS AND DETAILS~~
16. BORING LOGS SB A1-01 & SB A1-02
17. BORING LOGS SB A1-03 & SB A1-04
18. BORING LOGS SB A1-05 & SB A1-06
19. BORING LOGS SB A1-07 & SB A1-08
20. BORING LOG SB A1-09

GENERAL NOTES:

1. Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.
2. The Contractor is responsible for the design and performance of the lagging using no less than 3" nominal rough-sawn thickness and the minimum tabulated unit stress in bending (f_b), used in the design of timber lagging shall be 1000 psi.
3. The soldier piles shall be cleaned and given one shop coat of Inorganic Zinc-Rich primer.
4. All exposed concrete edges shall be chamfered ¾" except as noted.
5. Protective coat shall be applied to exposed surfaces of the concrete facing.
6. Existing utilities in conflict with soldier pile wall construction shall be abandoned or relocated according to directions given on the roadway plans.
7. All construction joints shall be bonded.
8. All elevations shown are based on the Chicago City Datum of 0.00, which is 579.19 feet above mean tide New York. (NAVD 88)
9. The wall shall be backfilled (where applicable) prior to placing the concrete facing.
10. The Contractor is responsible to coordinate all electrical crossings with this Contract and with Contract 62583.

TY·LIN INTERNATIONAL

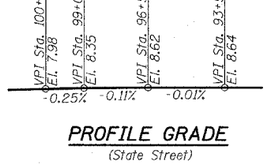


OFFSET SKETCH

LEGEND

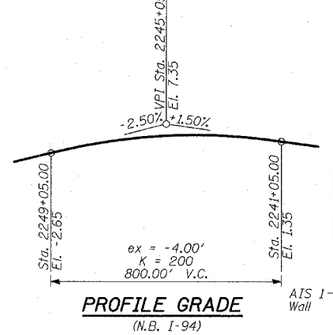
Boring Location

* Measured along Front Face of Wall.



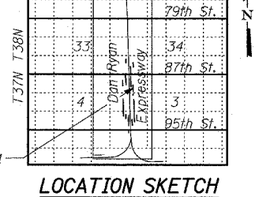
PROFILE GRADE

(State Street)

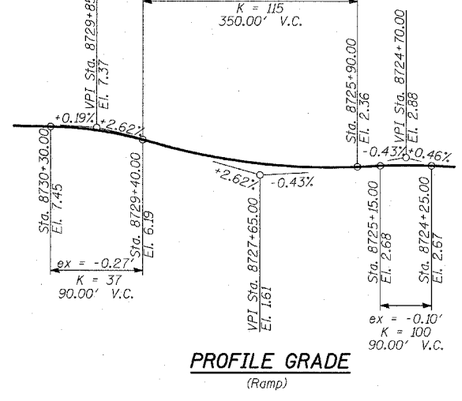


PROFILE GRADE

(N.B. I-94)



LOCATION SKETCH



PROFILE GRADE

(Ramp)

STATE OF ILLINOIS
PHILLIP D. FREY
081-004826
CHICAGO, ILLINOIS
LICENSED STRUCTURAL ENGINEER

Signed Phillip D. Frey
Phillip D. Frey, S.E. Il. Lic. No. 081-004826 Expires 11-30-2006.
for drawings 1 thru 20 of 20

Date 3/18/05

SHEET 1 OF 20

REVISIONS NAME	DATE
REVISED	04/15/05

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94 (DAN RYAN EXPRESSWAY)
RETAINING WALL ALONG STATE ST.
EXIT RAMP AT AIS #1
AIS 1 - GENERAL PLAN
STA. 2249+03.25 TO STA. 2243+03.25

S.N. 016-W954 DESIGNED BY: MI, MAF
SCALE: N.T.S. DRAWN BY: MAF, DJR
DATE: MARCH 18, 2005 CHECKED BY: TD, MI

p:\02373\structur\CTG\AIS 1\pw97d0R30_w954gn.dgn 12:18:13 PM 04/12/2005