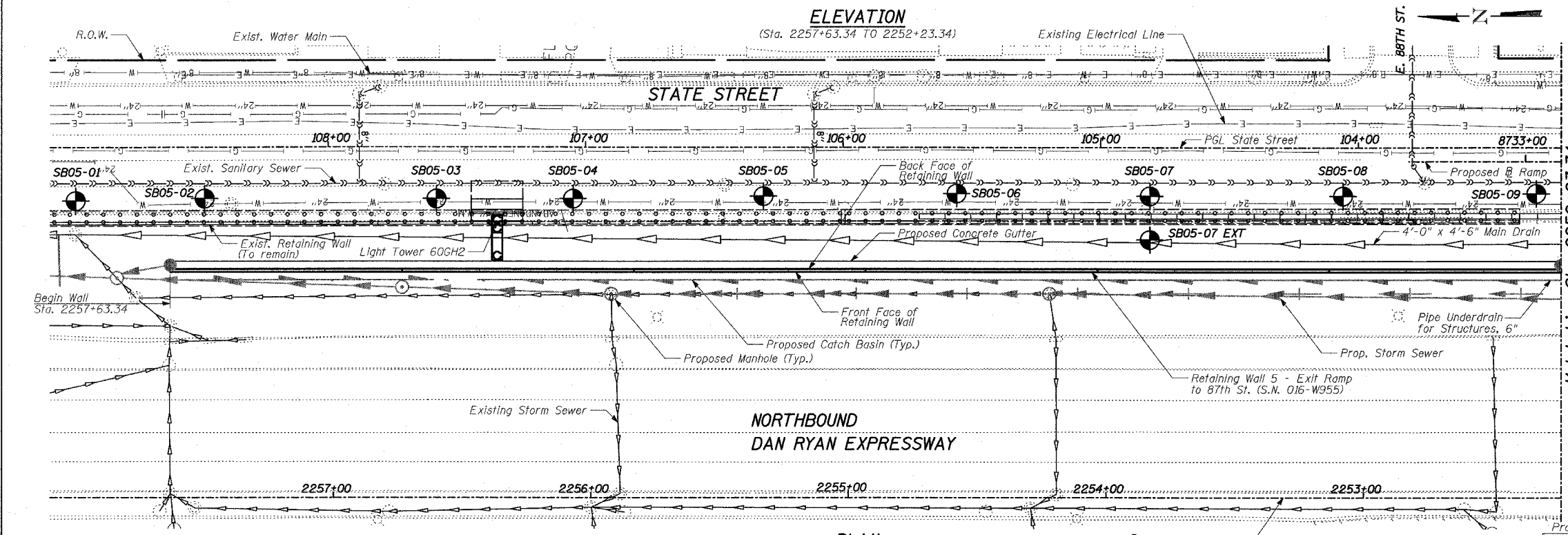
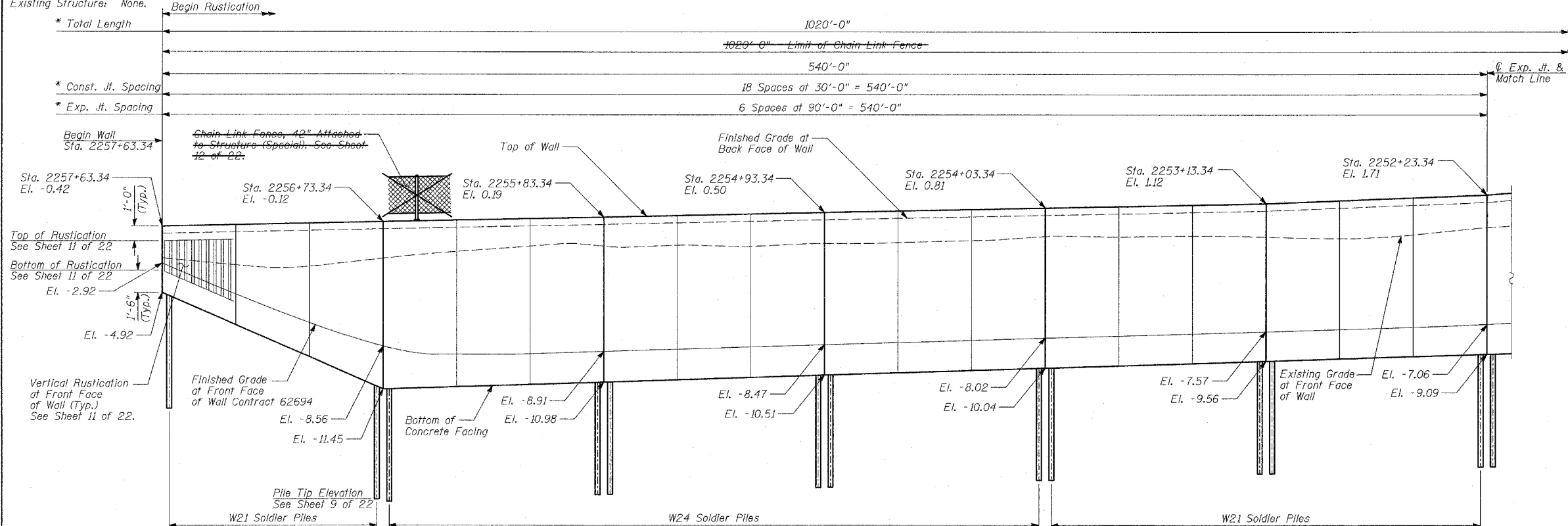


Benchmarks: BM 3553 Set "+" northwest bolt of traffic signal/light base at northeast intersection of 87th St. and State St. El. 8.47

Existing Structure: None.



- LEGEND**
- Boring Location
  - \* Measured along Front Face of Wall.

**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 3/4" 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.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94		COOK	860	518
STA. 2200+00.00 TO STA. 2362+00.00				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
* (1516.1, 1717 & 1818) R-8				62694

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Structure Excavation	CU YD	966
Concrete Structures	CU YD	429
Protective Coat	SQ YD	1,125
Rustication Finish	SQ FT	7,737
Stud Shear Connectors	EACH	1,738
Untreated Timber Lagging	SQ FT	8,253
Furnishing Soldier Piles (HP Section)	FOOT	444
Furnishing Soldier Piles (W Section)	FOOT	4,275
Reinforcement Bars, Epoxy Coated	POUND	39,030
Geocomposite Wall Drain	SQ YD	974
Pipe Underdrains for Structures, 6"	FOOT	1,020
Drilling and Setting Soldier Piles (in Soil)	CU FT	27,959
Chain Link Fence, 42" Attached to Structure (Special)	FOOT	1,020

**DESIGN SPECIFICATION**

AASHTO 2002 Standard Specifications for Highway Bridges

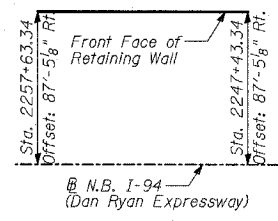
**DESIGN STRESSES**

**FIELD UNITS**  
 $f'_c = 3,500 \text{ psi}$   
 $f_y = 60,000 \text{ psi}$  (Reinforcement)  
 $f_y = 36,000 \text{ psi}$  (M270 Grade 36)  
Soldier Piles

**INDEX OF SHEETS**

1. GENERAL PLAN
2. GENERAL PLAN
3. PLAN AND ELEVATION STA. 2257+63.34 TO STA. 2255+83.34
4. PLAN AND ELEVATION STA. 2255+83.34 TO STA. 2254+03.34
5. PLAN AND ELEVATION STA. 2254+03.34 TO STA. 2252+23.34
6. PLAN AND ELEVATION STA. 2252+23.34 TO STA. 2250+43.34
7. PLAN AND ELEVATION STA. 2250+43.34 TO STA. 2248+63.34
8. PLAN AND ELEVATION STA. 2248+63.34 TO STA. 2247+43.34
9. PILE LAYOUT, DETAILS & BILL OF MATERIAL
10. WALL CROSS SECTIONS & DETAILS
11. RUSTICATION DETAILS
12. CHAIN LINK FENCE, 42" ATTACHED TO STRUCTURE (SPECIAL)
13. BORING LOGS SB05-01 & SB05-02
14. BORING LOGS SB05-03 & SB05-04
15. BORING LOGS SB05-05 & SB05-06
16. BORING LOG SB05-07 & SB05-07EXT
17. BORING LOGS SB05-08 & SB05-09
18. BORING LOG SB05-10 & SB05-10EXT
19. BORING LOGS SB05-11 & SB05-12
20. BORING LOGS SB05-12EXT & SB05-13A
21. BORING LOGS SB05-14A & SB05-15
22. BORING LOG SB05-16

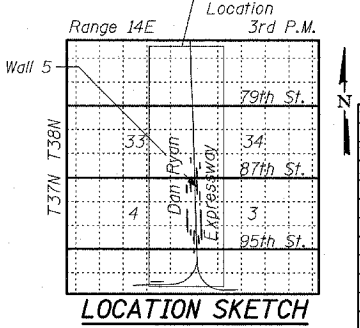
**APPROVED**  
FOR STRUCTURAL ADEQUACY ONLY  
*Ralph C. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES



**OFFSET SKETCH**



Signed *Phillip D. Frey*  
Phillip D. Frey, S.E., Ill. Lic. No. 081-004826 For drawings 1 thru 22 of 22  
Date **3/18/05**



**REVISIONS**

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**F.A.I. 94 (DAN RYAN EXPRESSWAY)**  
**RETAINING WALL ALONG STATE ST.**  
**EXIT RAMP TO 87TH ST.**  
**WALL 5 - GENERAL PLAN**  
**STA. 2257+63.34 TO STA. 2247+43.34**  
S.N. 016-W955 DESIGNED BY: MI, TB  
SCALE: N.T.S. DRAWN BY: TB, DJR  
DATE: MARCH 18, 2005 CHECKED BY: TD, MI