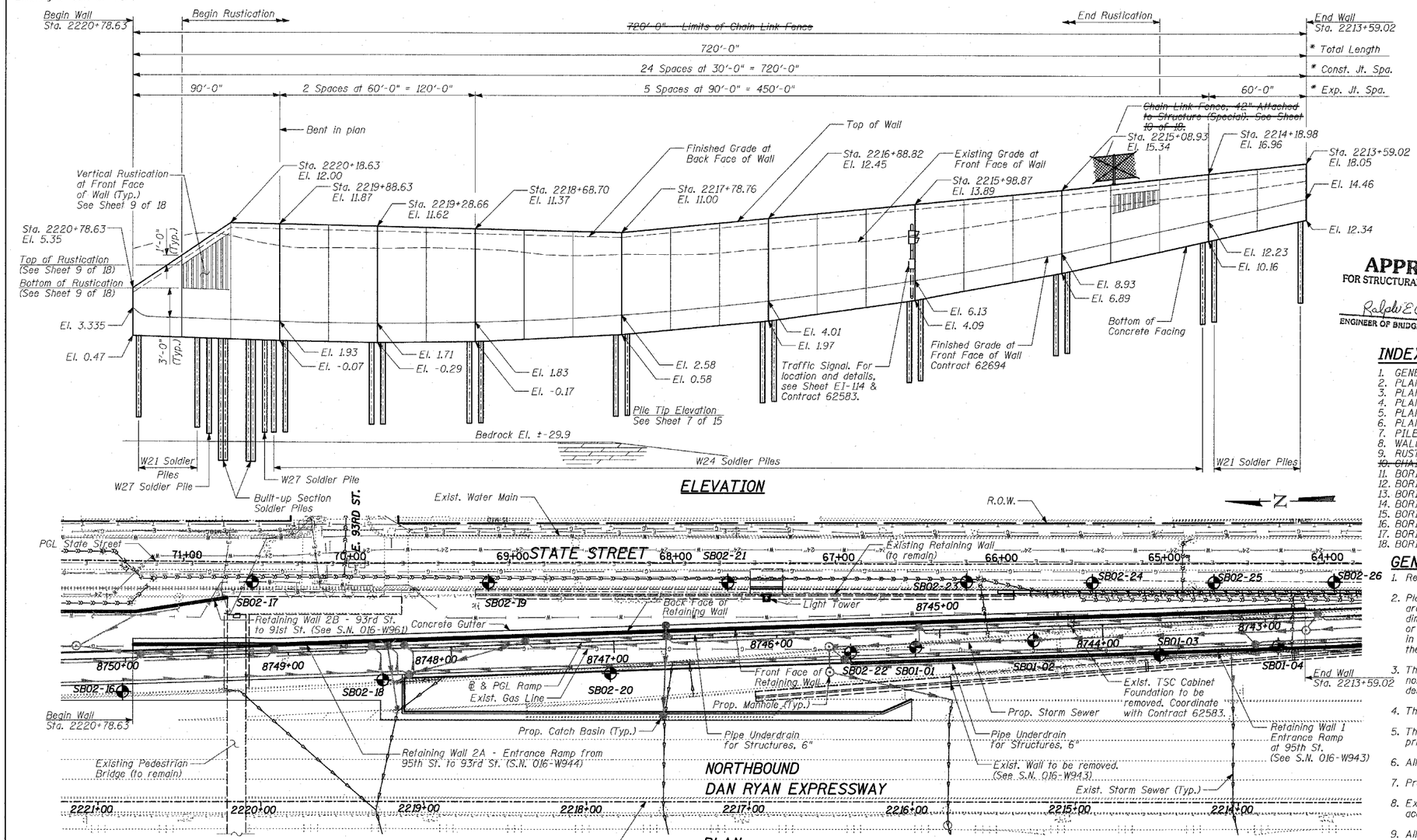
Benchmarks: BM 3522 Set "+" on south southeast flange bolt of hydrant ± halfway between north and south entrance to Citgo, east side of State St. and north of 95Th St. El. 18.06

Existing Structure: None

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 94 | * | COOK | 860 | 432 |
| STA. 2200+00.00 | | TO STA. 2362+00.00 | | |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT | | |

* (1516.1, 1717 & 1818) R-8

62694




## ELEVATION




## PLAN

## TOTAL BILL OF MATERIAL

| ITEM | UNIT | TOTAL |
|---|---|---|
| Slope Wall Removal | SQ YD | 56 |
| Structure Excavation | CU YD | 635 |
| Concrete Structures | CU YD | 292 |
| Protective Coat | SQ YD | 749 |
| Rustication Finish | SQ FT | 2,618 |
| Furnishing and Erecting Structural Steel | POUND | 4,570 |
| Stud Shear Connectors | EACH | 1,322 |
| Untreated Timber Lagging | SQ FT | 5,564 |
| Furnishing Soldier Piles (Built-up Section) | FOOT | 92 |
| Furnishing Soldier Piles (W Section) | FOOT | 3,983 |
| Reinforcement Bars, Epoxy Coated | POUND | 29,450 |
| Slope Wall 4 Inch | SQ YD | 4 |
| Geocomposite Wall Drain | SQ YD | 659 |
| Pipe Underdrains for Structures, 6" | FOOT | 720 |
| Drilling and Setting Soldier Piles (in Rock) | CU FT | 116 |
| Drilling and Setting Soldier Piles (in Soil) | CU FT | 27,643 |
| ~~Chain Link Fence, 42" Attached to Structure (Special)~~ | ~~FOOT~~ | ~~720~~ |

**APPROVED**
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (TSD)
ENGINEER OF BRIDGES AND STRUCTURES

## INDEX OF SHEETS


1. GENERAL PLAN
2. PLAN AND ELEVATION STA. 2220+78.63 TO STA. 2219+28.66
3. PLAN AND ELEVATION STA. 2219+28.66 TO STA. 2217+78.76
4. PLAN AND ELEVATION STA. 2217+78.76 TO STA. 2215+98.87
5. PLAN AND ELEVATION STA. 2215+98.87 TO STA. 2214+18.98
6. PLAN AND ELEVATION STA. 2214+18.98 TO STA. 2213+59.02
7. PILE LAYOUT, DETAILS & BILL OF MATERIAL
8. WALL CROSS SECTIONS & DETAILS
9. RUSTICATION DETAILS
10. ~~CHAIN LINK FENCE, 42" ATTACHED TO STRUCTURE (SPECIAL)~~
11. BORING LOGS SB02-16 & SB02-17
12. BORING LOGS SB02-18 & SB02-19
13. BORING LOGS SB02-20 & SB02-21
14. BORING LOGS SB02-21 & SB02-22
15. BORING LOGS SB02-23 & SB02-24
16. BORING LOGS SB02-25 & SB02-26
17. BORING LOGS SB01-01 & SB01-02
18. BORING LOGS SB01-03 & SB01-04


## DESIGN STRESSES

FIELD UNITS

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

## DESIGN SPECIFICATION

AASHTO 2002 Standard Specifications for Highway Bridges

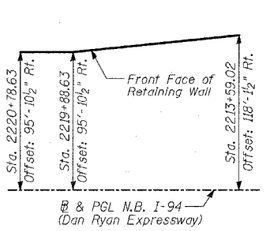
## GENERAL NOTES:

1. Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.
2. Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additonal compensation for a change in the scope of the work. However, the Contractor will be paid for the quantity actually finished at the unit price bid for the work.
3. 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.
4. The soldier piles shall be cleaned and given one shop coat of Inorganic Zinc-Rich primer.
5. The HSS structural steel lagging shall be cleaned and given one shop coat of Inorganic Zinc-Rich primer. Cost included with "Furnishing and Erecting Structural Steel."
6. All exposed concrete edges shall be chamfered $\frac{3}{4}$" except as noted.
7. Protective coat shall be applied to exposed surfaces of the concrete facing.
8. Existing utilities in conflict with soldier pile wall construction shall be abandoned or relocated according to directions given on the roadway plans.
9. All construction joints shall be bonded.
10. 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)
11. The wall shall be backfilled (where applicable) prior to placing the concrete facing.
12. The Contractor is responsible to coordinate all electrical crossings with this Contract and with Contract 62583.

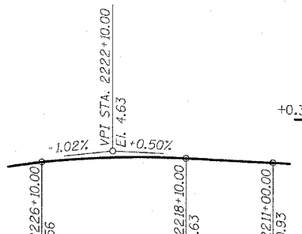
## LEGEND

Boring Location

* Measured along Front Face of Wall.

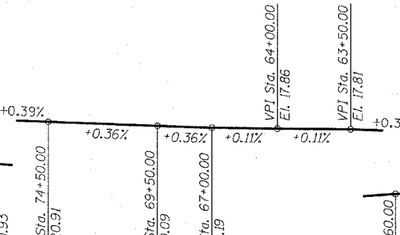



## OFFSET SKETCH



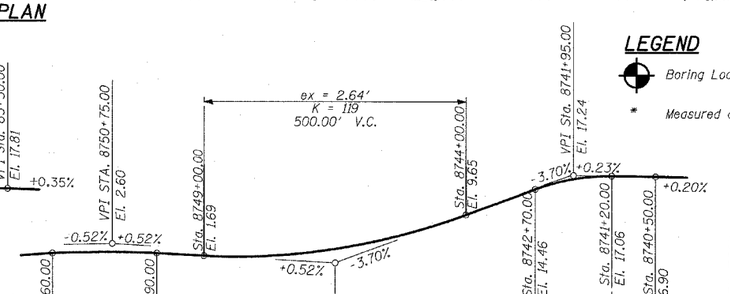

## PROFILE GRADE

(Northbound I-94)



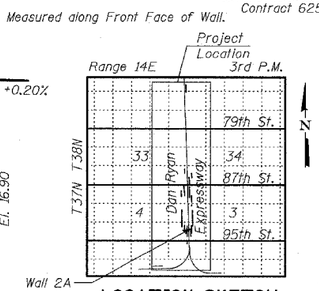

## PROFILE GRADE

(State Street)




## PROFILE GRADE

(Ramp)




## LOCATION SKETCH

TY·LIN INTERNATIONAL

STATE OF ILLINOIS — PHILLIP D. FREY — 081-004826 — CHICAGO, ILLINOIS — PROFESSIONAL ENGINEER

Signed Phillip D. Frey
Phillip D. Frey, S.E. IL Lic. No. 081-004826 Expires 11-30-2006.
For drawings 1 thru 18 of 18

Date 3/18/05

SHEET 1 OF 18

| REVISIONS | |
|---|---|
| NAME | DATE |
| | |
| REVISED | 04/15/05 |

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94 (DAN RYAN EXPRESSWAY)
RETAINING WALL ALONG STATE ST.
ENTRANCE RAMP FROM 95TH ST. TO 93RD ST.
WALL 2A - GENERAL PLAN
STA. 2220+78.63 TO STA. 2213+59.02

S.N. 016-W944 — DESIGNED BY: MI, DJR
SCALE: N.T.S. — DRAWN BY: DJR, MAF
DATE: MARCH 18, 2005 — CHECKED BY: TD, MI

$FILES $TIME$ $DATE$