Benchmarks: BM 3552 Set "+" northeast bolt of traffic signal/light base at southeast intersection of 91St St. and State St. El. 14.81

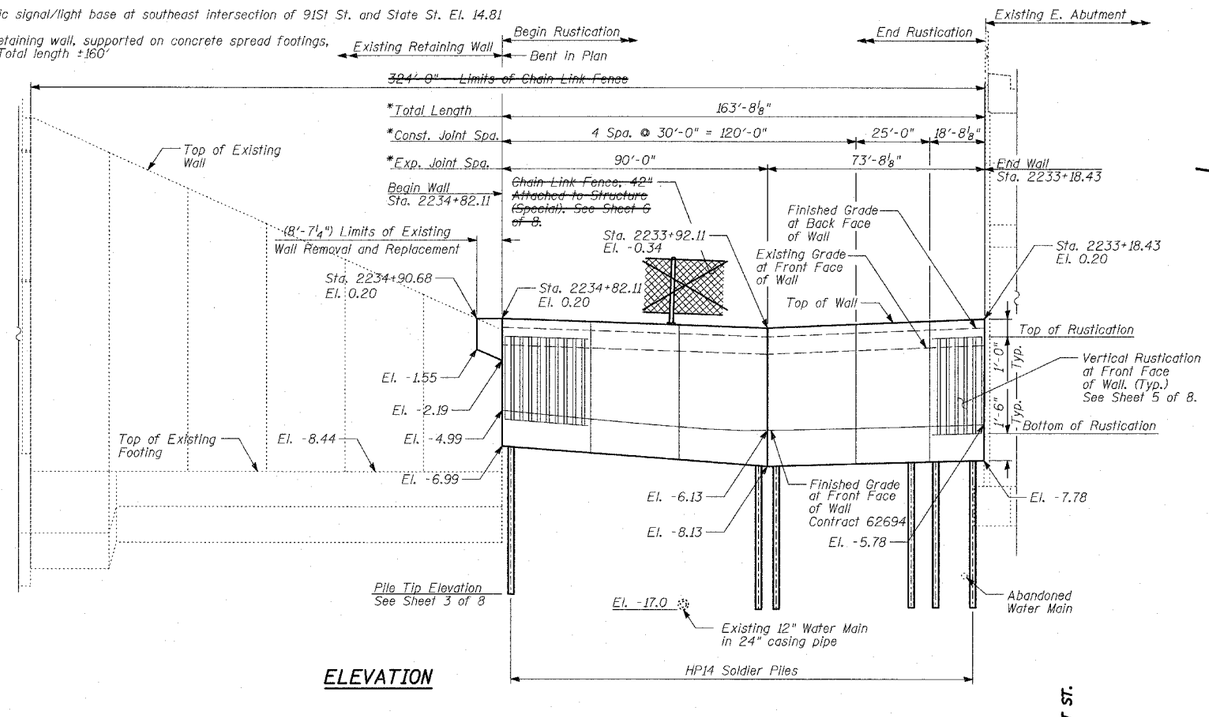
Existing: Structure: Reinforced concrete cantilever retaining wall, supported on concrete spread footings, along Northbound Dan Ryan. Built in 1960. Total length ±160'

Salvage: Total

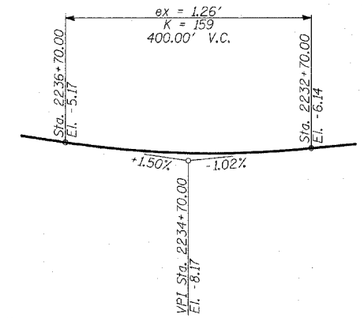
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	*	COOK	860	483
STA. 2200+00.00	TO STA. 2362+00.00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* (1516.1, 1717 & 1818) R-8

62694

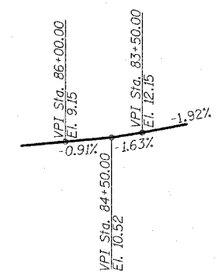


ELEVATION



PROFILE GRADE

(N.B. I-94)



PROFILE GRADE

(State Street)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	CU YD	1
Structure Excavation	CU YD	117
Concrete Structures	CU YD	55
Protective Coat	SQ YD	139
Rustication Finish	SQ FT	837
Stud Shear Connectors	EACH	208
Untreated Timber Lagging	SQ FT	929
Furnishing Soldier Piles (HP Section)	FOOT	544
Reinforcement Bars, Epoxy Coated	POUND	5,040
Geocomposite Wall Drain	SQ YD	113
Pipe Underdrains for Structures, 6"	FOOT	164
Drilling and Setting Soldier Piles (in Soil)	CU FT	2,722
~~Chain Link Fence, 42" Attached to Structure (Special)~~	~~FOOT~~	~~324~~

DESIGN SPECIFICATION

AASHTO 2002 Standard Specifications for Highway Bridges

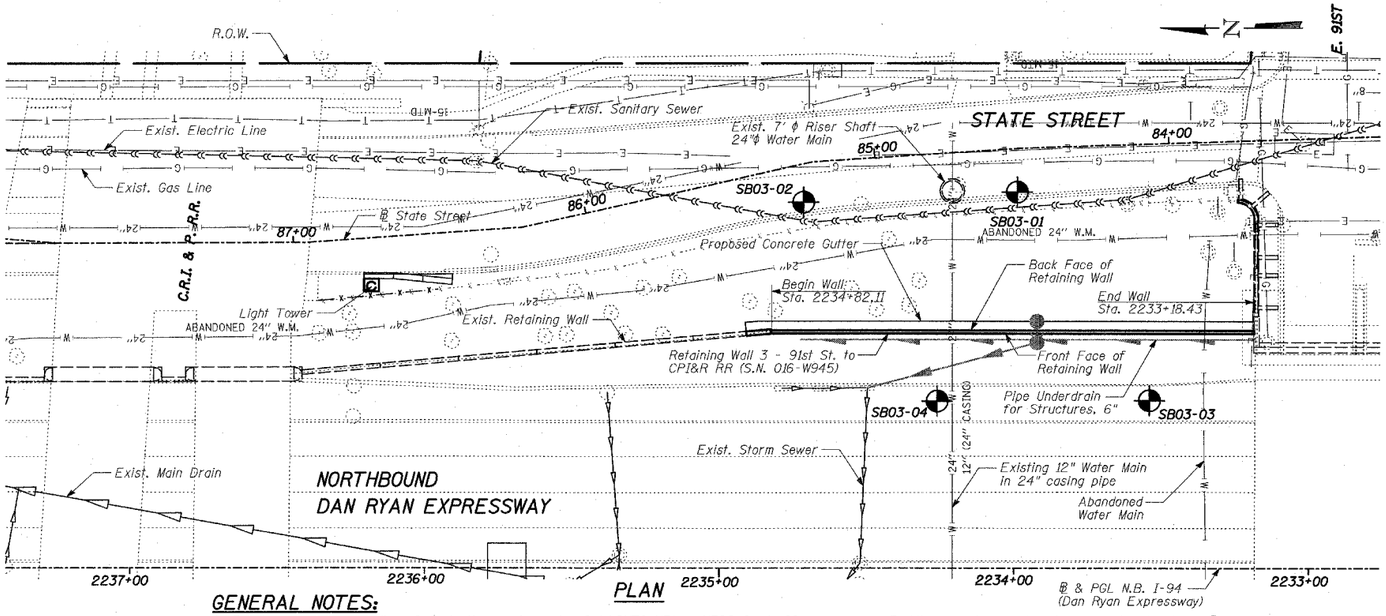
DESIGN STRESSES

FIELD UNITS

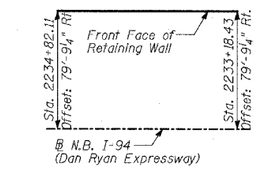
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (M270 Grade 36) Soldier Piles

INDEX OF SHEETS

1. GENERAL PLAN
2. PLAN AND ELEVATION STA. 2234+82.11 TO STA. 2233+18.43
3. PILE LAYOUT, DETAILS & BILL OF MATERIAL
4. WALL CROSS SECTIONS & DETAILS
5. RUSTICATION DETAILS
~~6. CHAIN LINK FENCE, 42" ATTACHED TO STRUCTURE (SPECIAL)~~
7. BORING LOGS SB03-01 & SB03-02
8. BORING LOGS SB03-03 & SB03-04



PLAN



OFFSET SKETCH

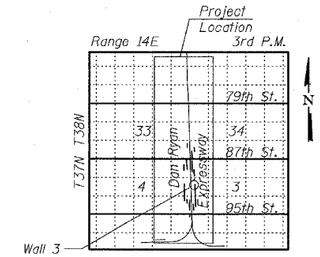
LEGEND

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. Plan dimensions and details relative to existing structures 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. All exposed concrete edges shall be chamfered ¾" except as noted.
6. Protective Coat shall be applied to exposed surfaces of the concrete facing.
7. Existing utilities in conflict with soldier pile wall construction shall be abandoned or relocated according to directions given on the roadway plans.
8. All construction joints shall be bonded.
9. 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)
10. The wall shall be backfilled (where applicable) prior to placing the concrete facing.
11. The Contractor is responsible to coordinate all electrical crossings with this Contract and with Contract 62583.



LOCATION SKETCH

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

Signed Phillip D. Frey
Philip D. Frey, S.E. IL Lic. No. 081-004826 Expires 11-30-2006.
Date 3/18/05

For drawings 1 thru 8 of 8

SHEET 1 OF 8

REVISIONS NAME	DATE
REVISED	04/15/05

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94 (DAN RYAN EXPRESSWAY)
RETAINING WALL ALONG STATE ST.
91ST ST. TO CPI&R RR
WALL 3 - GENERAL PLAN
STA. 2234+82.11 TO STA. 2233+18.43

S.N. 016-W945 DESIGNED BY: MI, MAF
SCALE: N.T.S. DRAWN BY: MAF, TB
DATE: MARCH 18, 2005 CHECKED BY: TD, MI

TY·LIN INTERNATIONAL