Benchmarks: BM 3550 Set "+" westerly flange bolt of hydrant at southwest intersection of 91st St. and Lafayette Ave. El. 22.88

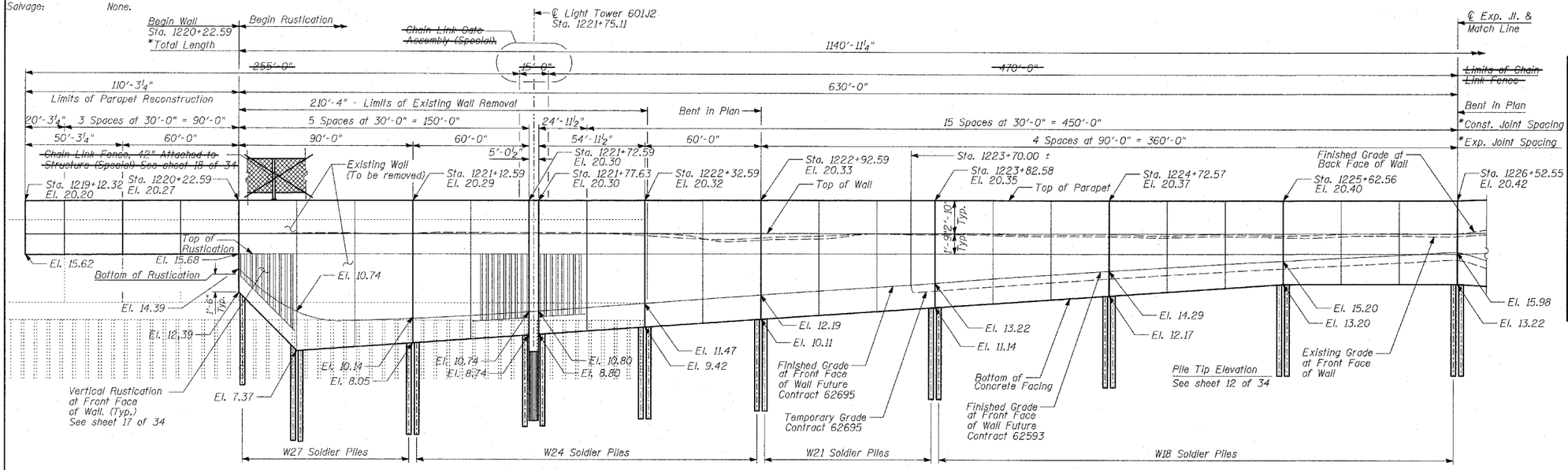
Existing Structure: Reinforced concrete cantilever retaining wall, supported on concrete pile footings, along East edge of Lafayette Avenue, at 93rd St. Built in 1960. Total length ±450'-6".**
Reinforced concrete cantilever retaining wall, supported on concrete pile footings, along East edge of Lafayette Avenue, at 91st St. Built in 1960. Total length ±240'.**

Salvage: None.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	•	COOK	907	473
STA. 1200+00.00	TO STA. 1365+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

• (1516.1, 1717 & 1818) R-9

62695



ELEVATION

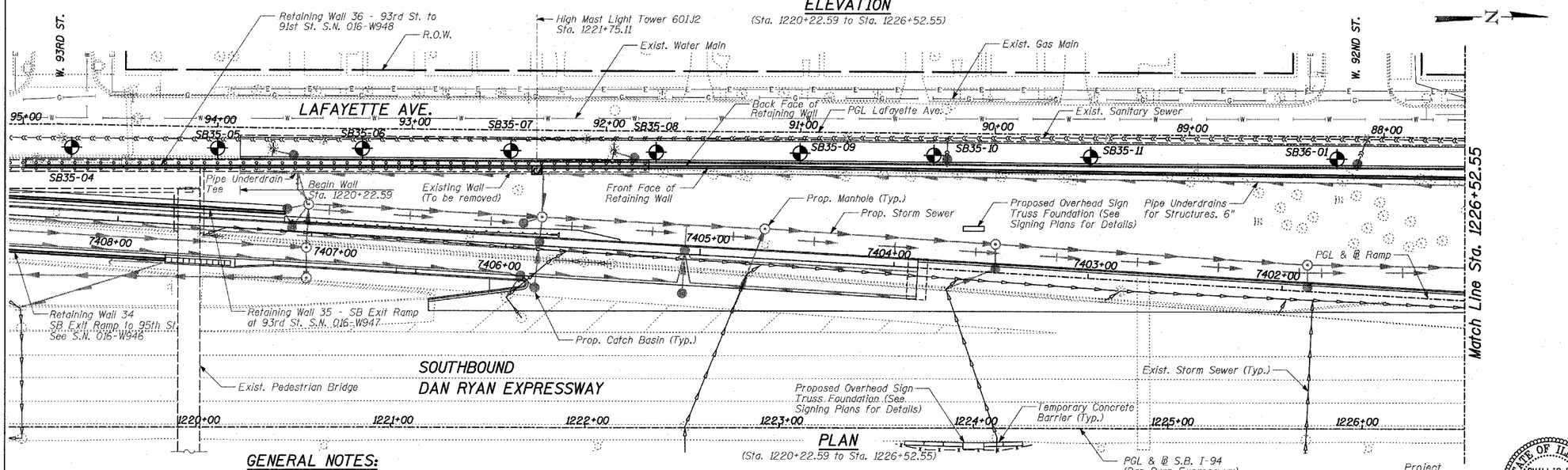
(Sta. 1220+22.59 to Sta. 1226+52.55)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures No. 1	EACH	1
Structure Excavation	CU YD	632
Concrete Structures	CU YD	558
Protective Coat	SQ YD	1,800
Rustication Finish	SQ FT	7,101
Stud Shear Connectors	EACH	1,890
Untreated Timber Lagging	SQ FT	6,869
Furnishing Soldier Piles (W Section)	FOOT	6,298
Reinforcement Bars, Epoxy Coated	POUND	71,780
Geocomposite Wall Drain	SQ YD	827
Pipe Underdrains for Structures, 6"	FOOT	1,141
Drilling and Setting Soldier Piles (in Soil)	CU FT	31,831
~~Chain Link Fence, 42" Attached to Structure (Special)~~	~~FOOT~~	~~1,364~~
~~Chain Link Gate Assembly (Special)~~	~~EACH~~	~~1~~
Drilled Shaft in Soil 36"	FOOT	30

INDEX OF SHEETS

1. GENERAL PLAN
2. GENERAL PLAN
3. REMOVAL PLAN AND DETAILS
4. PLAN AND ELEVATION STA. 1219+12.32 TO STA. 1221+12.59
5. PLAN AND ELEVATION STA. 1221+12.59 TO STA. 1222+32.59
6. PLAN AND ELEVATION STA. 1222+32.59 TO STA. 1223+82.58
7. PLAN AND ELEVATION STA. 1223+82.58 TO STA. 1225+62.56
8. PLAN AND ELEVATION STA. 1225+62.56 TO STA. 1227+42.55
9. PLAN AND ELEVATION STA. 1227+42.55 TO STA. 1229+22.55
10. PLAN AND ELEVATION STA. 1229+22.55 TO STA. 1231+02.55
11. PLAN AND ELEVATION STA. 1231+02.55 TO STA. 1232+28.44
12. PILE LAYOUT
13. BILL OF MATERIAL
14. LIGHT TOWER 60IJ2 FOUNDATION DETAILS
15. LIGHT TOWER DETAILS
16. WALL CROSS SECTIONS & DETAILS
17. RUSTICATION DETAILS
~~18. CHAIN LINK FENCE, 42" ATTACHED TO STRUCTURE (SPECIAL)~~
~~19. GATE PLAN AND NOTES~~
~~20. GATE ELEVATIONS~~
~~21. GATE SECTIONS~~
~~22. GATE SECTIONS AND DETAILS~~
23. BORING LOGS SB35-05 & SB35-06
24. BORING LOGS SB35-06 & SB35-07
25. BORING LOGS SB35-08 & SB35-09
26. BORING LOGS SB35-10 & SB35-11
27. BORING LOGS SB36-01 & SB36-02
28. BORING LOGS SB36-03 & SB36-04
29. BORING LOGS SB36-05 & SB36-06
30. BORING LOGS SB36-06 & SB36-07
31. BORING LOGS SB36-08 & SB36-09
32. EXISTING RETAINING WALL (1 OF 3)
33. EXISTING RETAINING WALL (2 OF 3)
34. EXISTING RETAINING WALL (3 OF 3)



PLAN

(Sta. 1220+22.59 to Sta. 1226+52.55)

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

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson (TJD)
ENGINEER OF BRIDGES AND STRUCTURES

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 additional 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. The wall shall be backfilled (where applicable) prior to placing the concrete facing.
8. If existing piles conflict with the proposed wall, the existing piles shall be cut off no more than 1'-0" below the proposed concrete facing. Soil disturbance below the cutoff elevation must be minimized.
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 Contractor is responsible to coordinate all electrical crossings with this Contract and with Contract 62583.
12. The Contractor is responsible to verify the locations of the existing piles prior to drilling for the soldier piles. Any discrepancies in the locations of the existing piles are to be immediately reported to the Engineer. Proposed piles are to be placed between existing piles under the supervision of the Engineer.

LEGEND

Boring Location

* Measured along Front Face of Wall.

** Portions of existing walls to be removed to accomodate proposed wall.

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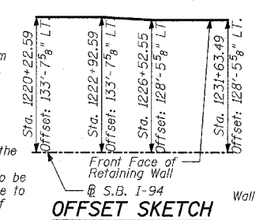
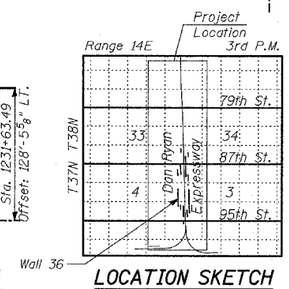


OFFSET SKETCH



LOCATION SKETCH

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 34 of 34

Date 3/25/05

SHEET 1 OF 34

REVISIONS	
NAME	DATE
REVISED	04/15/05

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 94 (DAN RYAN EXPRESSWAY)
RETAINING WALL ALONG LAFAYETTE AVE.
93RD ST. TO 91ST ST.
WALL 36 - GENERAL PLAN
STA. 1220+22.59 TO STA. 1231+63.49

S.N. 016-W948 — DESIGNED BY: MI. DJR
SCALE: N.T.S. — DRAWN BY: DJR, TB
DATE: MARCH 25, 2005 — CHECKED BY: TD, MI

$DATE$ $TIME$