

Benchmark: BM No. 3538
 "x" Cut on Easterly flange bolt of fire hydrant
 at Northeast corner of 47th Street and La Salle St.
 El. 17.31

All elevations are based on the Chicago City Datum (C.C.D.)

Salvage: None

Existing Structure Description:

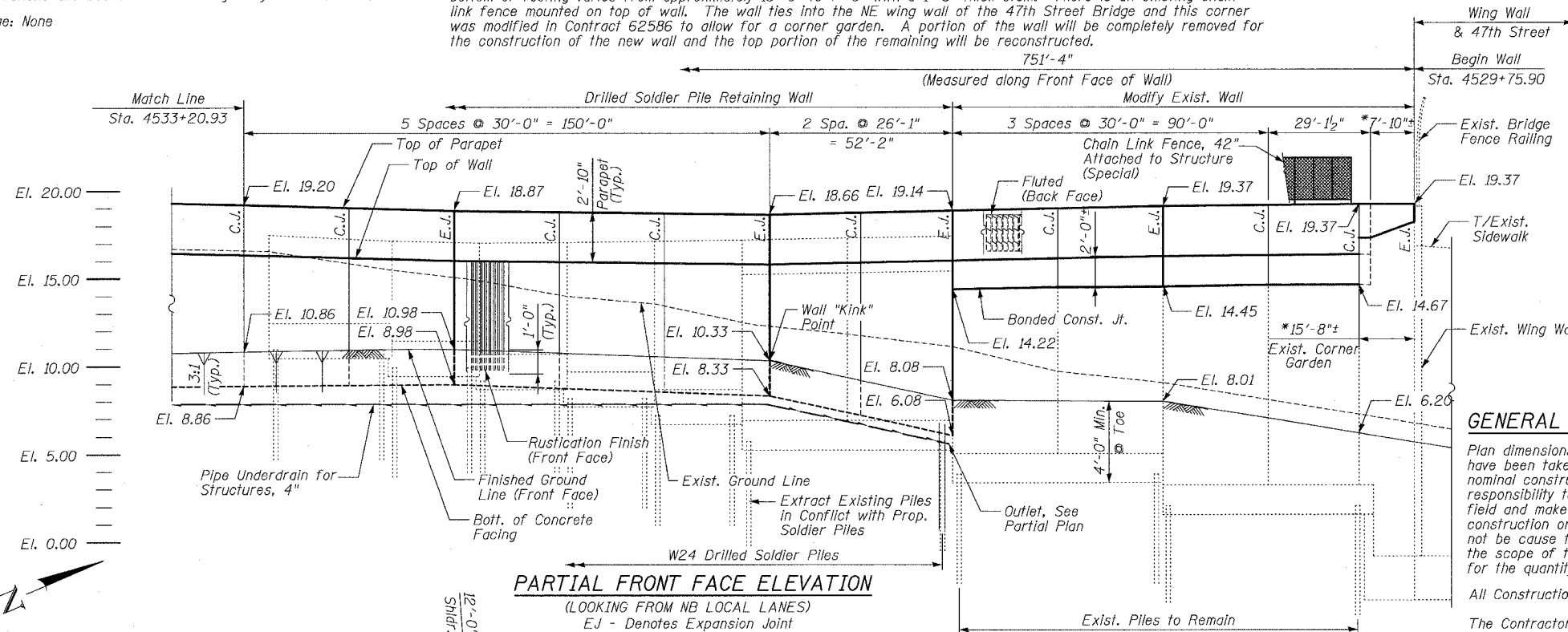
The existing wall was built in 1962 as part of Section 2122-907HB and Section 2122-921 PT. I in two phases designated as part of the 47th Street Bridge (S.N. 016-1156) and Wall "E-4". The existing wall is a cast-in-place concrete cantilever type on pile supported footings with a total length of 323'-4". The height from top of wall to bottom of footing varies from approximately 18'-9" to 7'-0" with a 1'-3" thick stem. There is an existing chain link fence mounted on top of wall. The wall ties into the NE wing wall of the 47th Street Bridge and this corner was modified in Contract 62586 to allow for a corner garden. A portion of the wall will be completely removed for the construction of the new wall and the top portion of the remaining will be reconstructed.

* Corner Garden wall at an angle with respect to wall, 7'-10" dimension is measured along original wall.

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90		COOK	565	373
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
62301		*(2021-922 PT2 ETC 2324.6-1P) R-10		

TOTAL BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Structures	Each	1
Porous Granular Embankment (Special)	Cu. Yd.	211
Concrete Removal	Cu. Yd.	18
Structure Excavation	Cu. Yd.	195
Concrete Structures	Cu. Yd.	180.0
Concrete Superstructure	Cu. Yd.	71.6
Protective Coat	Sq. Yd.	592
Rustication Finish	Sq. Ft.	4,222
Stud Shear Connectors	Each	992
Untreated Timber Lagging	Sq. Ft.	3,724
Furnishing Soldier Piles (W Section)	Foot	2,150
Reinforcement Bars, Epoxy Coated	Pound	39,920
Geocomposite Wall Drain	Sq. Yd.	302
Pipe Underdrains for Structures 4"	Foot	625
Pile Extraction	Each	20
Temporary Soil Retention System	Sq. Ft.	1200
Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.	12,973
Chain Link Fence, 42" Attached to Structure (Special)	Foot	470
Chain Link Gate Assembly (Special)	Each	1
Drilled Shaft in Soil, 44"	Foot	30



GENERAL NOTES:

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 furnished at the unit price for the work.

All Construction joints shall be bonded.

The Contractor is responsible for the design and performance of the lagging using no less than a 3" nominal rough-sawn thickness and timber with a minimum allowable bending stress f_b of 1000 psi.

All exposed concrete edges shall be chamfered 3/4" except as noted.

Protective Coat shall be applied to the top and back face of parapet and to the exposed front face in areas where the wall is within 25 feet of edge of pavement.

Additional Notes:

1. Offsets given to Back Face of Wall. Station and offsets in parentheses are along Frontage Road or ramp.

2. For HMLT foundation and work pads, see Electrical Infrastructure Plans and Structure Details. Towers by others.

3. Wall to be built along straight chords between const. joints.

4. Min. Facing in contact with soldier pile shall be 3'-0".

5. Outlet pipe underdrain to daylight at Invert given with 1% min. slope. Provide Rodent Shield. Cost included with Pipe Underdrain for Structures, 4"

6. See Sheet 8 for Offset Sketch.

LEGEND

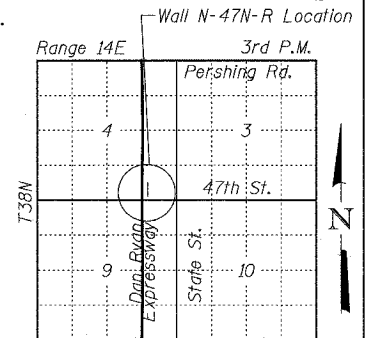
- Soil Boring Location
- High Mast Lighting Foundation and Tower (See Notes)
- Removal of Exist. Structures
- Proposed Drainage Structure
- Proposed Underdrain
- Proposed Storm Sewer



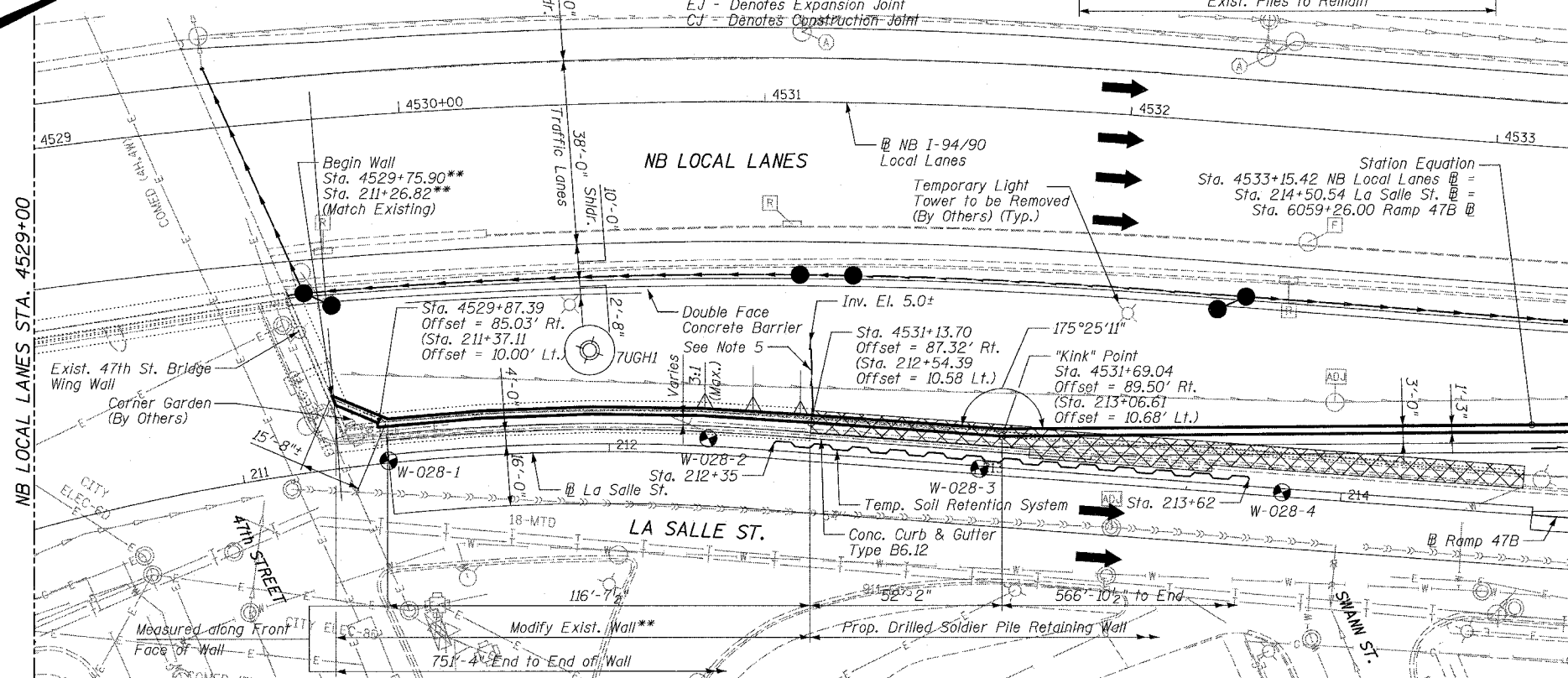
Brian L. Umbright
 Date: July 13, 2006
 License Expires: November 30, 2006

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

Paul E. Adams
 ENGINEER OF BRIDGES AND STRUCTURES



LOCATION SKETCH
 SHEET 1 OF 24



PARTIAL PLAN

DESIGN SPECIFICATIONS

DESIGN STRESSES

** Utilize existing wall as reference to construct modification

2002 AASHTO

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 36,000$ psi (M270 Gr 36) Soldier Piles

BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbainc.com

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 GARFIELD BLVD TO 31ST STREET (NB LOCAL LANES)
 COOK COUNTY
 STA. 4529+75.90 TO STA. 4537+30.74
 RETAINING WALL N-47N-R
 GENERAL PLAN AND ELEVATION 1
 S.N. 016-W977
 SCALE: NTS
 DATE: JUNE 9, 2006
 DRAWN BY: MTR
 CHECKED BY: BLU