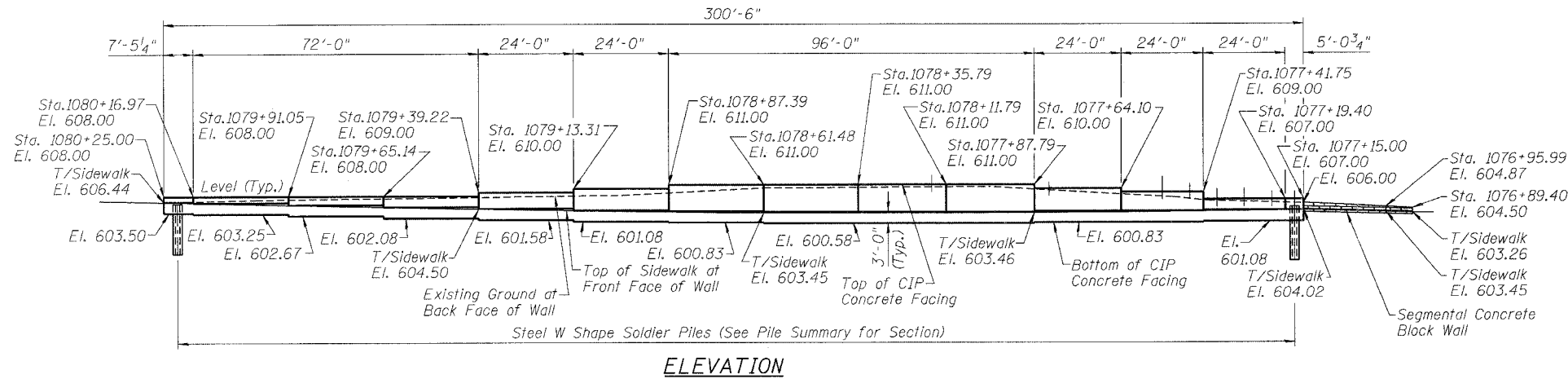


Benchmark: TBM #5 NE flange bolt on hydrant at NW corner of Linden and Sheridan Road. Elevation 616.37
 Existing Structure: Timber railroad tie wall. Length = 570.0'

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
FAP 3509	00-00173-00-FP	COOK	246	125
SHEET NO. 1				
9 SHEETS				

Contract #83964



LEGEND:
 • Soil Boring
 ○ Light Pole
 - x - Exist. Fence
 - x - Prop. Fence

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structure Excavation	Cu. Yd.	244
Concrete Structures	Cu. Yd.	105.2
Precast Concrete Caps	Each	38
Precast Concrete Panel	Sq. Ft.	1510
Stud Shear Connectors	Each	272
Untreated Timber Lagging	Sq. Ft.	1531
Furnishing Soldier Piles (W Section)	Foot	862
Reinforcement Bars, Epoxy Coated	Pound	15,330
Geocomposite Wall Drain	Sq. Yd.	123
Pipe Underdrains for Structures, 4"	Foot	301
Plug Existing Sanitary Sewers	Each	6
Segmental Concrete Block Wall	Sq. Ft.	94
Drilling and Setting Soldier Piles	Cu. Ft.	3562
Ornamental Fence	Foot	175
Retaining Wall Removal	Foot	436

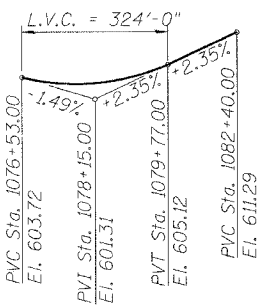
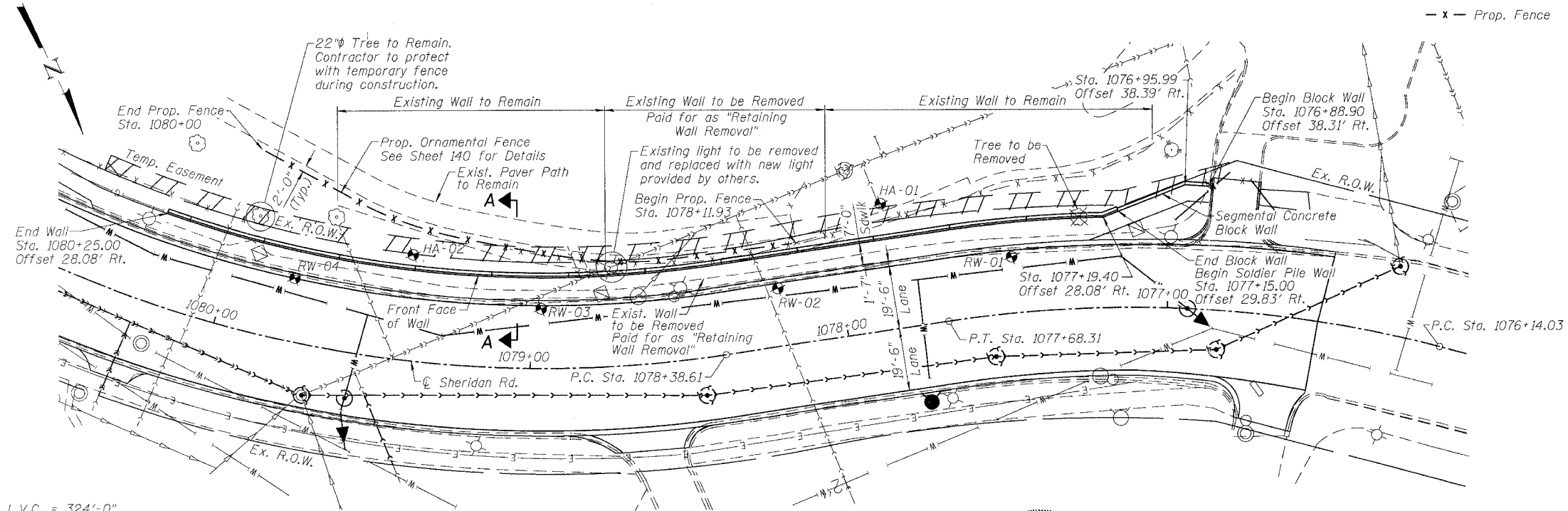
INDEX OF SHEETS

1. General Plan
2. Plan and Elevation I
3. Plan and Elevation II
4. Soldier Pile Details
5. Boring Logs I
6. Boring Logs II
7. Boring Logs III
8. Boring Logs IV
9. Boring Logs V

GENERAL NOTES:

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. The Contractor is responsible for the design and performance of the lagging using no less than 3 in. nominal rough-sawn thickness and timber with a minimum allowable bending stress of 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 have a standard 3/4" chamfer unless otherwise noted.
6. The wall shall be backfilled (where applicable) prior to placing the concrete facing.
7. All construction joints shall be bonded.
8. See sheet 134 for Precast Concrete Facing, Precast Concrete Cap and connection details.

Notes:
 1. Dimensions and offsets are along the front face of the Precast Concrete Facing.



CURVE SHERCL-7

PI Sta. = 1076+92.25
 $\Delta = 23^\circ-15'-46"$ (LT)
 $D = 15^\circ-04'-40"$
 $R = 380.00'$
 $T = 78.22'$
 $L = 154.28'$
 $E = 7.97'$
 $e = 2.0\%$
 P.C. Sta. = 1076+14.03
 P.T. Sta. = 1077+68.31

CURVE SHERCL-8

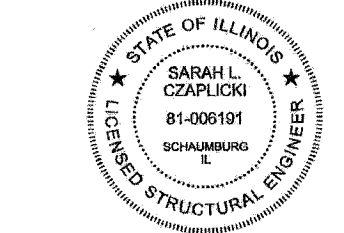
PI Sta. = 1081+01.86
 $\Delta = 69^\circ-25'-33"$ (RT)
 $D = 15^\circ-04'-40"$
 $R = 380.00'$
 $T = 263.25'$
 $L = 460.45'$
 $E = 82.28'$
 $e = 2.0\%$
 P.C. Sta. = 1078+38.61
 P.T. Sta. = 1082+99.06

DESIGN SPECIFICATIONS

AASHTO 2002 "Standard Specifications for Highway Bridges".

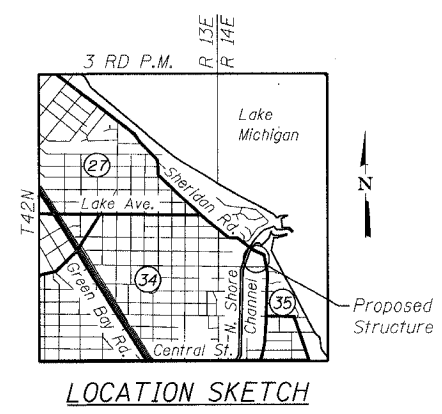
DESIGN STRESSES

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 36,000$ psi (Soldier Piles)
 (AASHTO M270 Grade 36)



Sarah L. Czaplucki 07/11/07
 SARAH L. CZAPLUCKI, P.E., S.E.
 NO. 081-006191
 EXP. DATE 11/30/2008

"I certify that to the best of my knowledge, information and belief, this retaining wall design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with the requirements of the current 'AASHTO Standard Specifications for Highway Bridges'."

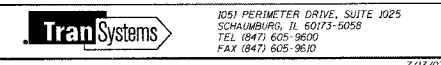


PROFILE GRADE
 (Along @ Roadway)

DESIGNED	MDS
CHECKED	SLC
DRAWN	MDS
CHECKED	SLC

GENERAL PLAN

RETAINING WALL ALONG SHERIDAN ROAD
 F.A.P. ROUTE 3509 SECTION 00-00173-00-FP
 COOK COUNTY
 STATION 1077+15.00 TO STATION 1080+25.00



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