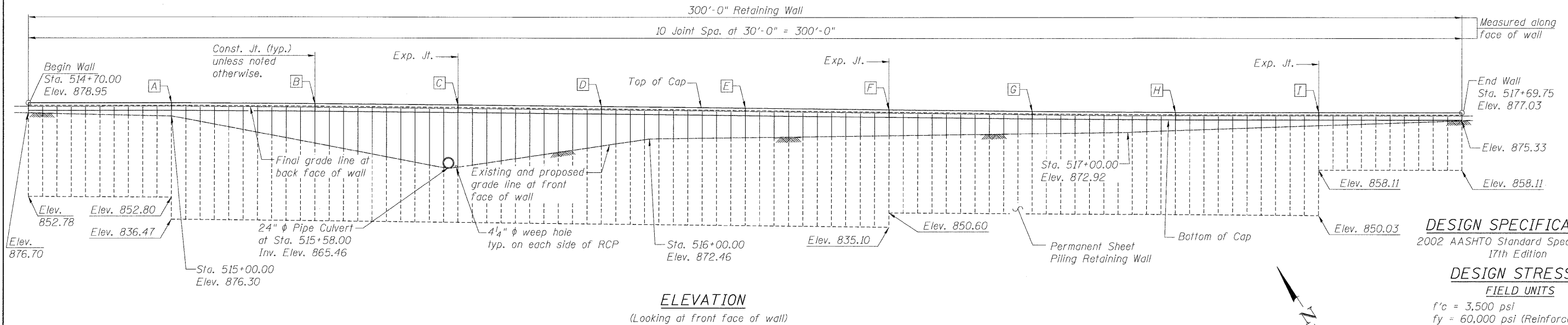


Bench Mark: 1/2" Iron rod with cap, Sta. 513+52.54, 19.68' Lt., Elev. 881.31.

Existing Structure: None.



DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications,
17th Edition

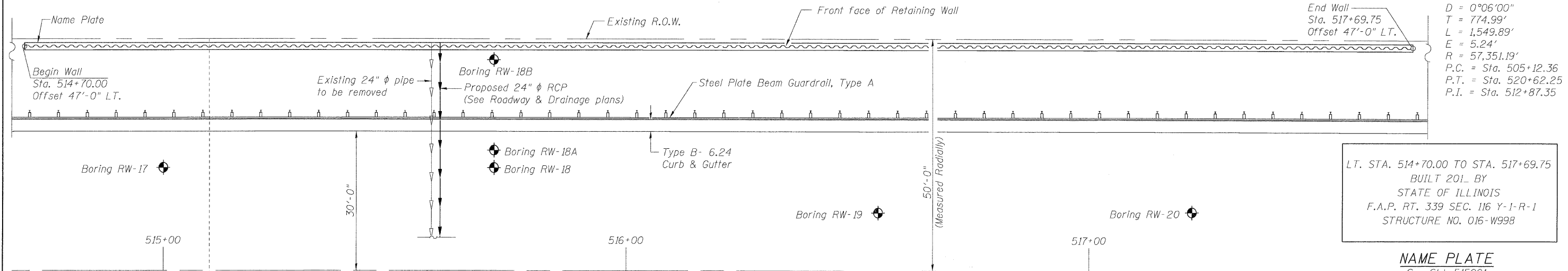
DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 38,500$ psi (Sheet Piling)
(Gr. 39 AASHTO M202)

CURVE DATA

(Illinois Route 62)
 $\Delta = 1^\circ 32' 54''$ (RT)
 $D = 0^\circ 06' 00''$
 $T = 774.99'$
 $L = 1,549.89'$
 $E = 5.24'$
 $R = 57,351.19'$
P.C. = Sta. 505+12.36
P.T. = Sta. 520+62.25
P.I. = Sta. 512+87.35



NAME PLATE
See Std. 515001

Note:
Offsets measured radially to ϕ IL 62
from front face of sheet piling.

PLAN

TOP OF CAP DATA

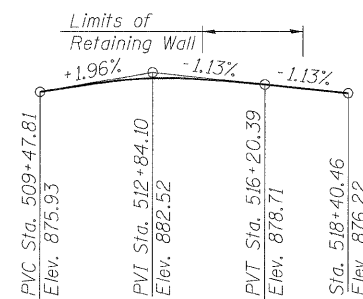
LOCATION	STATION	ELEVATION
A	514+99.98	878.97
B	515+29.95	878.78
C	515+59.93	878.54
D	515+89.90	878.26
E	516+19.88	877.95
F	516+49.85	877.60
G	516+79.83	877.26
H	517+09.80	877.03
I	517+39.78	877.03

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A706 Gr. 60. See Special Provisions.
Reinforcement bars designated (E) shall be epoxy coated.
Concrete cap shall be constructed after backfill is in place.
It shall be the Contractor's responsibility to verify the location of the existing underground utilities prior to starting construction.
The Contractor shall take precaution during pile driving operations so as not to damage any proposed and/or existing utilities.

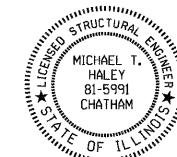
TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Structures	Cu. Yd.	38.9
Stud Shear Connectors	Each	400
Reinforcement Bars, Epoxy Coated	Pound	3960
Permanent Steel Sheet Piling	Sq. Ft.	10010
Pipe Underdrains for Structures 4"	Foot	301
Geocomposite Wall Drain	Sq. Yd.	46
Porous Granular Embankment, Special	Cu. Yd.	61.0
Name Plates	Each	1



PROFILE GRADE
(along ϕ IL 62)

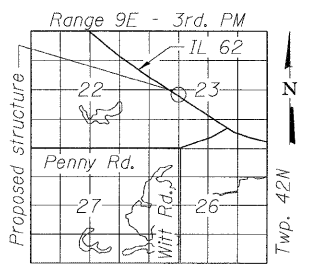
APPROVED
FOR STRUCTURAL ADEQUACY ONLY
D. Carl Puzos
ENGINEER OF BRIDGES AND STRUCTURES



Michael T. Haley
Michael T. Haley
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2012

INDEX OF SHEETS

1. General Plan & Elevation
2. Wall Details-1
3. Wall Details-2
4. Wall Details-3
5. Soil Borings-1
6. Soil Borings-2
7. Soil Borings-3



LOCATION SKETCH

RETAINING WALL NO. 5
STA. 514+70.00 TO STA. 517+69.75



USER NAME =	DESIGNED - ESH	REVISED -
PLOT SCALE =	CHECKED - ADB	REVISED -
PLOT DATE =	DRAWN - RH	REVISED -
	CHECKED - ADB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 016-W998

SHEET NO. 51 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	82
CONTRACT NO. 60135			ILLINOIS FED. AID PROJECT	